

BOATS

FEBRUARY 1958 • 35 CENTS

Operating At Night
New Defenders For "The Cup"
Notes Of A Home Boat Builder
Conference On Safety

• THE PRACTICAL MAGAZINE OF POWER, OUTBOARDS AND SAIL • •



Houston To New York—2800 Miles—By Outboard



Which size Sea-Horse would your family like?

TAKE YOUR CHOICE! FROM SPUNKY 3
TO NEW V-50, EVERY '58 JOHNSON
IS A MODEL OF DEPENDABILITY!



New! World's first outboard V-engine—the Super Sea-Horse V-50. Inspired by fine car engine design. 4 cylinders—70.7 cu. in. displacement—full 50 hp. Single twin-barrel

carburetor. "Floating" powerhead and sound-sealed lower unit for super quietness. Car-type key switch 12-volt electric starting—\$840. Manual starting—\$740.



New Super Sea-Horse 35 Speed for skiing—big cruiser power. Many V-50 features. Electric starting—\$625. (Standard 35: \$585 with electric starting or \$495 manual).



New Sea-Horse 18 Pep for skiing, power to push a houseboat, or perfect for pairing on a cruiser. Quiet and dependable. With electric starting—\$475. Manual—\$395.



New Sea-Horse 10 Dependable performer on all kinds of open boats and light runabouts. Fast and rugged as ever, but now 7 lb. lighter and lower in price—\$310.



New Sea-Horse 7½ Power to spare for the average rowboat or light utility craft. Easy portability for fishing and general family use. Quiet and smooth-running—\$270.



New Sea-Horse 5½ Pioneer of quiet outboards—fishermen's favorite. Big motor features include gearshift, twist-grip throttle and slip-clutch prop protection—\$230.



New Sea-Horse 3 Thirty-three pounds of portable power for small boats, dinghies and auxiliary use. Angle-Matic drive takes you safely wherever a boat will float—\$160.

Prices f.o.b. factory, subject to change. OBC certified brake hp at 4000 rpm (18s, 35s at 4500)

Be our guest—see THE BOB HOPE SHOW, NBC-TV, Thurs. night, Feb. 6



FREE 1958 SEA-HORSE CATALOG! Full color and full details. Write: Johnson Motors, 382 Pershing Rd., Waukegan, Ill. (Div. of Outboard Marine Corp. In Canada, mfd. by Johnson Motors, Peterborough, Ontario.)



First in dependability...

Johnson

pioneers of the "V" age engine

'58 Aristo-Craft »

*"Jet Age" go! - FINEST, FASTEST
SPORTS BOAT EVER DESIGNED!*



\$ 00

**NEW SHAPE OF MOTION AND THRILLS—
SPEED AND STYLE TO PASS 'EM ALL!**



Every part custom
crafted for integrated
beauty impossible
with the stock hard-
ware used on ordi-
nary boats.



Only Aristo-Craft gives you the
matchless beauty of Speed-Flite
styling. Photo shows majestic
sweep of Avalon "15" stabilizer
fins.

**COMPARE QUALITY, FEATURES AND PRICES
AND YOU'LL CHOOSE ARISTO-CRAFT, THE LEADER!**

Sea Flash "13".....\$579
Torpedo "14".....\$667
Avalon "15".....\$819
Matador "15".....\$995

FREE!

GET NEW BOAT BOOK

Atlanta Bo
Atlanta u

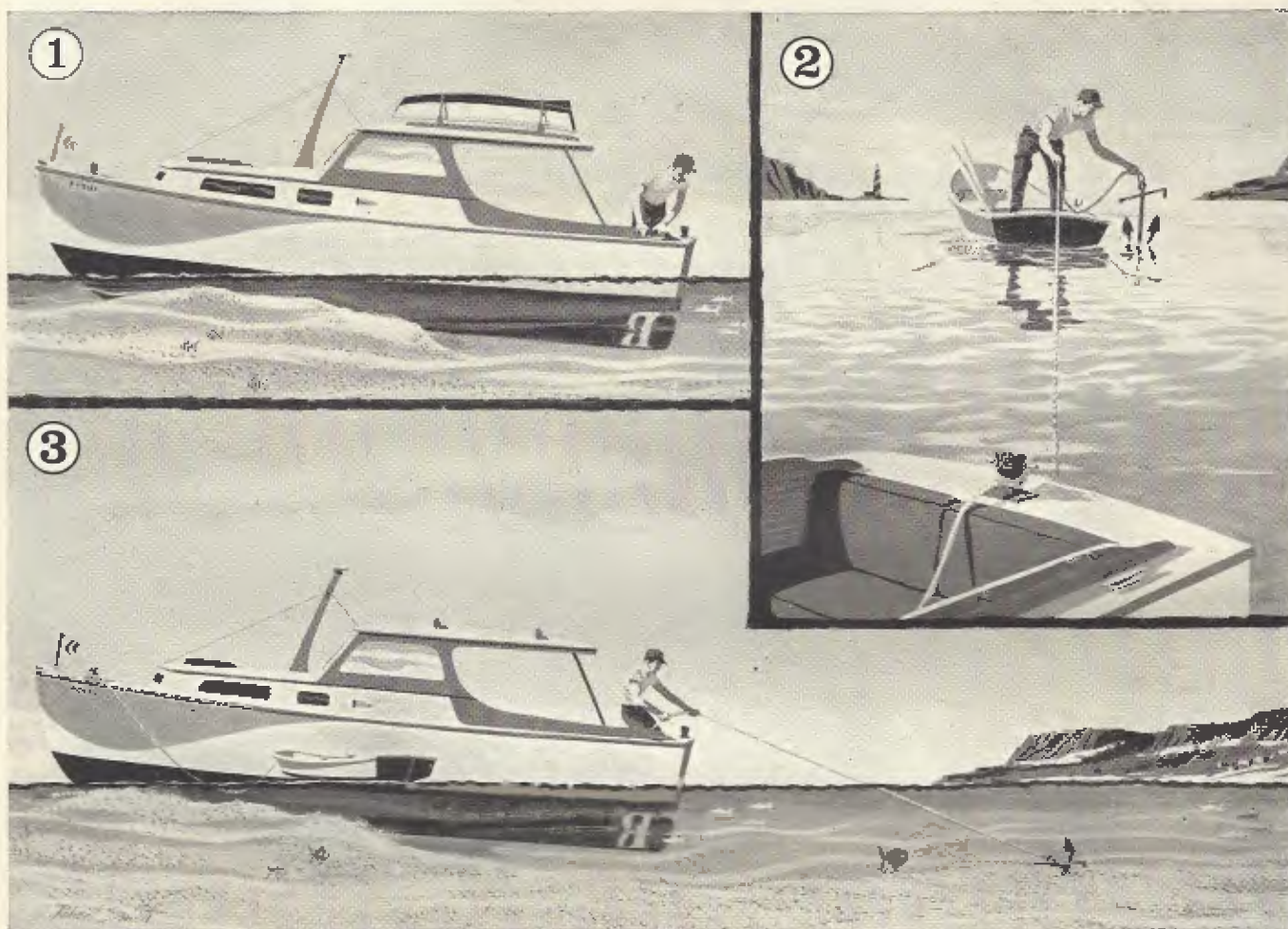
Name

State

DEALERS—SELL THE LEADER!

WORKS

How safe a skipper are you?



RUNNING AGROUND-- do you know what to do?

Here are three tips to help you get away safely and quickly:

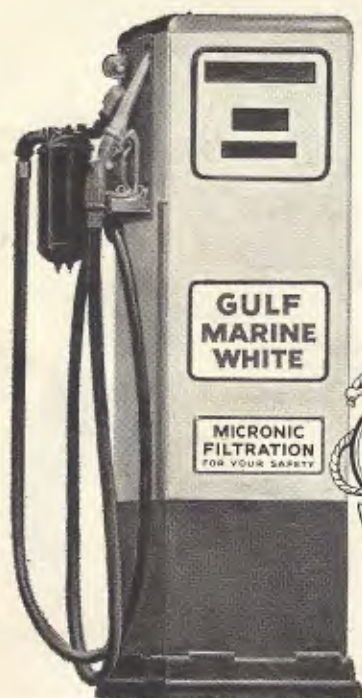
1 Probably, your first instinctive act is to throw the engine into reverse and gun it hard. *Well, don't!* On a sandy bottom, you'll only bed yourself in deeper. On rocks there's a danger of tearing your hull.

2 Take out an anchor in your dinghy and set it hard, slightly to starboard

of the stern of your grounded boat.

3 Aboard your boat again, alternately pull on the anchor line and give short surges with the reverse, to wiggle your way off.

In a tricky spot like this, you want to be sure of top engine performance. Play it safe! Always use Gulf Marine White—Micronic-Filtered at the pump to protect your engine.



Micronic-Filtered for your safety. Any gasoline can pick up destructive particles of rust and dirt on its trip from the refinery. *But only Gulf removes them—*

Go safely with
GULF MARINE WHITE

by a Micronic Filter on every pump! **Clean-burning, 100% marine gasoline.** Protects your engine from power-robbing carbon deposits. Forms no gum.

The Practical Magazine of Power, Outboard and Sail

Formerly Motor Boat Magazine • Established 1904

Editorial Office: 117 Broad Street, Milford, Conn.

Telephone: Trinity 8-0926

Business Office (Advertising and Subscription): 33 West 46th Street, New York 36, N. Y. Telephone: Circle 6-8980

Subscription price: \$3.50 a year. Add \$1 for foreign postage
Single copies: 35 cents each.

ALFRED STANFORD, Editor & Publisher

Managing Editor: HOYT S. GRIFFITH, Assistant Editor: VIRGINIA WALLACE, Photo Editor: HELEN G. RIPLEY, Contributing Editors: ROLAND BIRNN, PETER M. STANFORD, GERALD TAYLOR WHITE, SSCD, BOB WHITTIER, SSCD.

FRANK A. SMITH, Business Manager

Assistant to Business Manager: JACK DeDALTO, Circulation: MILDRED PHILLIPS, Pacific Coast Representatives: JOS. W. CONROW, 1775 WOODBURY ROAD, PASADENA, CALIF. Florida Representative: CLARENCE BRACEY, PUBLISHER'S REPRESENTATIVES OF FLORIDA, 1219 HENDRICKS, JACKSONVILLE, FLA.

CONTENTS

PAGE

AS WE WRITE today the recollection of the National Small Boat conference in Washington in December is still in our minds. The things that make boating different from driving on land are various and blessed. But one of the aspects of the water that is hard for the newcomers to digest, however quickly they understand the mysteries of piloting, is the vagary of the weather. In our role as, we hope, a useful pal of the small boatman, we bring you this month Peter Stanford on the subject of foul weather in small boats. There will be two more installments to come on this subject for it is indeed a big one. The author has sailed hundreds of miles off shore in a little 25 ft. teapot with an outboard as auxiliary.

WHAT GOT INTO Clayton Meyers to be so full of candor about his shortcomings as a home boat builder? He's a first class builder. We hope you enjoy his "Confessions" in this issue. All members of the clan of build-it-yourself know full well the mistakes they make. It ought to be a relief and a comfort to learn the experts stumble too. Truth is, all boats are short of perfect: it's the competent guy who's really good who's willing to talk about their faults.

WE'RE ALWAYS relieved when night comes on and a blurry, distant shoreline is suddenly pin pointed and identified with the flash of an unmistakable light. Some of the finest passages we've ever made have been at night, and certainly some of the best cockpit conversations have been held then. But every now and then we run into the newer sailor who is diffident about running at night. Hence this month's collection of wisdom from Roland Birnn.

ALTHOUGH DEDICATED to the small boatman's world, we can't ignore the forthcoming international tussle for the America's cup, a millionaire's game, but one the whole world loves to watch. This month Norry Hoyt gives us as much of an inside look at the coming 12 meters as anyone is likely to get till we see them afloat this spring.

WE JUST SQUEEZED a few words into last month's issue about the New Horizons class—a little auxiliary that was designed with more care and worry than a cup defender to try to provide a wholesome, all around boat for the average family. This month we bring you more particulars.

A. S.

PHOTO CREDITS: COVER, top: M. E. Warren photo; lower left: Cavalier Boats photo; lower right: Dave Edwardes photo, "Ann V" Chris-Craft cruiser.

Page 14, Helen Ripley photo; p. 17, Standard Oil Co., of N. J., photo; p. 18, Arthur Underwood photo; p. 19, Raytheon Corp., drawings; p. 20, Author's photo; p. 21-22, Morris Rosenfeld photos; p. 23, Rosenfeld photo; Victor De Palma, Freelance Photographers Guild Inc., photo; p. 24-25, Author's photos; p. 26, U.S. Coast Guard photo; p. 27, Author's photo, Mike Olive, photo; p. 28, Helen Ripley map, Studtman photo; p. 29, Author's photos; p. 30-32, Atkin drawings; p. 33, Scott Atwater Mfg. Co., photo, Trojan boat; Evinrude Motors photo, Dunphy boat; Neal Beckner photo, Wizard boat; Bee Line Mfg. Co., photo, Mercury motor; p. 34, Author's photos, Florida State News Bureau photo; p. 35, Author's drawings; p. 36, Eric Wahleen photos.

COMING . . . NEXT MONTH

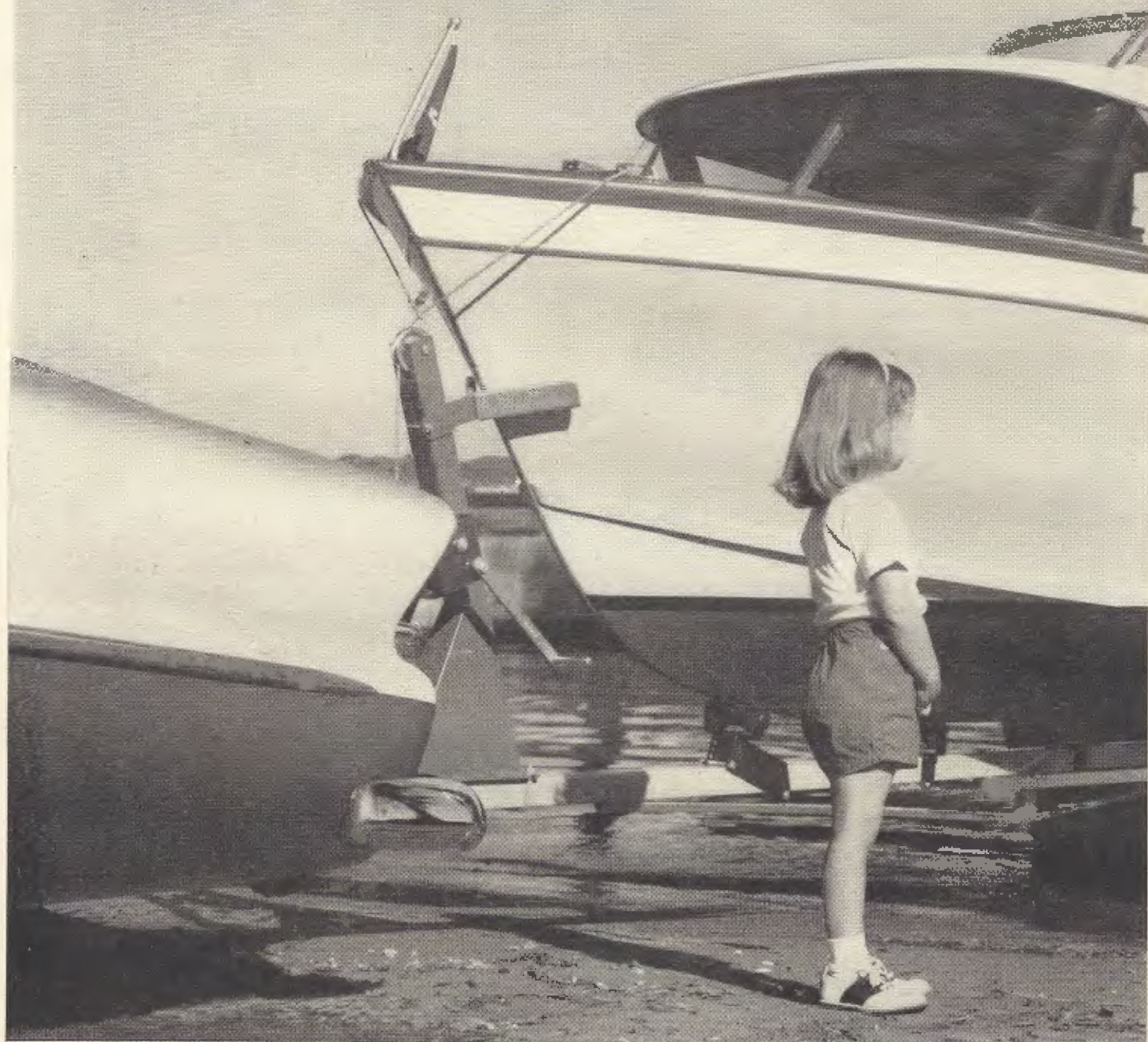
Look Ahead to Spring . . . things you can do to get a head start on your fitting out chores.

Mid-California Cruise . . . exploring the waterways of the Sacramento-Joaquin Delta.

Rejuvenating an Old Cruiser . . . things that can be done to modernize an ancient, but able, boat.

Volume 55, Number 2, February, 1958. BOATS published monthly by Motor Boat Publications, Inc. Publication office, Concord, New Hampshire. Editorial office, 117 Broad St., Milford, Conn. Business Office, 33 West 46th Street, New York 36, N. Y. Entered as Second Class matter at the Post Office at Concord, New Hampshire, December 1, 1956, under the Act of March 3, 1879. Subscription price \$3.50 per year. For foreign postage add \$1.00. Single copies 35 cents each.

today's finest boats are



Cavalier 19-ft. semi-enclosed Sports Cruiser sleeps 2, takes up to 120 hp, either inboard or outboard, for speeds up

***Quality fir plywood construction
makes the new Chris-Craft Cavaliers
light...rugged...ready for action***

WHY PAY MORE--or settle for less--when you get so much more in a plywood boat?

Just look at this smart Cavalier cruiser. Even out of water you can see the look of action. The gracefully-contoured, high-performance plywood hull gives you flashing acceleration and sports-car maneuverability.

And like all well-designed plywood boats, the new Cavaliers have that good-and-solid "feel." No annoying drumming or tinny slapping. Even at top speed, you get a smooth, quiet and comfortable ride.

For Exterior plywood means stout, rugged construction--

built of exterior plywood



to 33 mph. Other models, including utilities, from 15 to 22 ft.

superior strength that gives you a margin of safety should you accidentally hit debris or misgauge a docking run.

Greater damage resistance simplifies maintenance and repair problems. Plywood boats stay tight and dry, year after year. They're lighter, too; easier to handle out of water.

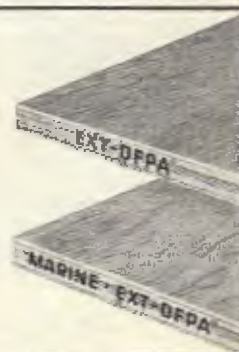
Check with your local Chris-Craft dealer to learn more about how the new Cavaliers give you modern styling and superb quality without the penalty of a high price tag.

And remember, whatever the make or model, your best buy is always a plywood boat.

DOUGLAS FIR PLYWOOD ASSOCIATION, TACOMA 2, WASHINGTON

EXT-DFPA® MEANS QUALITY EXTERIOR PLYWOOD MADE WITH WATERPROOF MARINE GLUE

Whether you buy or build, be sure all plywood is genuine EXT-DFPA waterproof Exterior plywood. (Comes in several grades, including solid-core "Marine" grade for planking.) It's used by all reputable boat manufacturers.



BOATS

THE YEAR ROUND BOAT SHOW

New boats, engines, and accessories are introduced by the manufacturers all year around. Now it isn't necessary to wait until the big annual Boat Shows, for BOATS will present new products as they appear.

Conversion Engines By Stokes

EACH OF THE NEW ENGINES by Stokes Marine Supply Co. is completely marine converted. The four new engines featured this year are the Willys Lightning Six, the Hudson Wasp and Hornet, and the 275 hp Packard V-8. Marine conversions for automobile engines through 1957 models may be obtained now. Conversions for 1958 engines will be announced as soon as they are ready. The company also offers rebuilt marine engines and rebuilt automobile engines complete with conversion equipment installed for those who do not wish to do their own conversion work.

Stokes also features marine hardware and accessories including galley pumps, cabin heaters, horns, boat hooks, and other general supplies for boat owners. A catalog may be obtained from the company.

Stokes Marine Supply Co., 505 E. Chicago St., Coldwater, Mich.



The Stokes conversion of the Willys Lightning 6 engine is delivered ready to install and use.

Boats And Kits By Custom Craft

CUSTOM CRAFT'S ARMOR GLASS, a reinforced plastic, is the result of much experimenting and testing in resin and fiberglass raw materials. It is featured in the 1958 line of Custom Craft boats and boat-kits, and is available to the home craftsman to cover his own boat hull. Either Super XXX Poly Resin or Super XXX Pox Resin is recommended in conjunction with Blu-chrome Fibreglas fabric for this process. The Pox Resin is less expensive, the Poly Resin gives a harder, stronger and tougher finish. Once applied according to directions, the necessity for further sanding, scraping, caulking and painting is eliminated. Armor Glass is also recommended for use in automobile body repairs, and for the many little and big jobs which are constantly cropping up around the house.

Custom Craft makes its Sea Ray fiberglass boats available in four choices, to suit the buyer's budget and time. The half shape with jig seats is the most economical. Most difficult curvatures, color and finish are molded in, and decking material can be obtained locally.

For a small additional payment, a complete boat shape and deck kit may be acquired, with pre-cut deck parts, notched



The Custom Craft 14-ft Sea Ray is made of fiberglass, is available in several stages, from kit to finished boat.

and grooved as required, screws, varnish and stain. All parts are Phillipine mahogany or Marine Grade Plywood.

A semi-finished completely assembled boat, ready for painting is the third item. This allows the handyman to choose the final styling in deck finish and trim that he wants on his boat. Or, if a complete boat is desired, there is a Custom Craft Sea Ray Fibreglas boat in many models, including the Champion, Interceptor, St. Clair, Saberjet, Thunderbolt, and Victory Series.

All Custom Craft hulls, including the half-finished models, are available with the exclusive Dart Step moulded in.

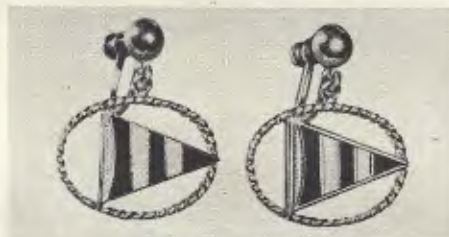
Custom Craft, Commodore Perry Harbor, Buffalo 7, N.Y.

Gifts From The Crow's Nest

GIFTS WITH A REALLY personal touch are hard to find. The Crow's-Nest helps solve this problem in a variety of unusual and distinctive items for boats themselves, or the men and women who skipper them. Their new 68 page catalogue of accessories, both practical and decorative, is available on request, and contains many articles which any boat-owner, or even any would-be boat owner, would relish having. The choice ranges from galley equipment to foul weather wearing apparel.

New this year is Yacht Club burgee jewelry for both men and women. Using the boatman's own club burgee as the central motif, the jewelry is made up to individual order. Wrought in sterling silver, it is nevertheless moderately priced. Among many other items there are colorful cuff-links, tie clips, lapel buttons, cigarette lighters and cases, pins, button earrings and gay drop earrings with a rope hoop enclosing the triangular emblem.

Crow's-nest, 495 Fifth Ave., New York, 18, N. Y.



Drop earrings from The Crow's Nest. Silver rope hoop encloses club burgee.

Sonar To Show Three New Radiotelephones

THERE WILL BE three new models of marine radiotelephones in the Sonar line—all featuring the Sonar Antenna pack for greater talking power. All comply with Coast Guard regulations and will meet all the new FCC regulations.

Model 65 is a 65-watt unit. It has six marine channels plus broadcast band, and is designed so that the power supply and the receiver-transmitter are self-contained. It is available for six or 12 volt electrical systems and is priced at \$395.

The Sonar Model 90 is a 90-watt marine radiotelephone that has six marine channels, plus broadcast. It may be obtained for use with 12-v or 32-v DC operation. Including dynamotor and vibrator power supply, it is priced at \$495.

The third new model is No. 160, a 160, watt unit with six marine channels and broadcast band. It is available for 12-v and 32-v DC and 117-v AC operation.

The Sonar Model D-120 depth indicator is to have a new bulb designed by the company to provide better illumination, and make it possible to read the indicator even in bright sunlight. The company has announced also that owners of Sonar depth indicators may have complete conversions done by the factory for a small fee.

Sonar Radio Corp., 3050 W. 21st St., Brooklyn 24, N. Y.

(Continued on page 8)

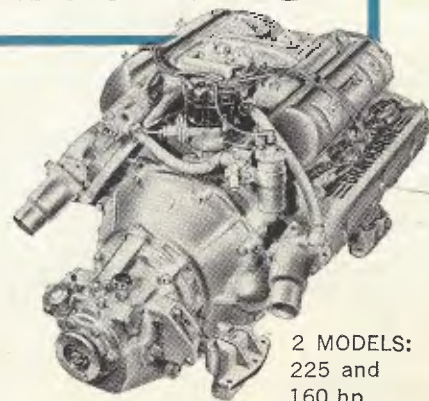
EXCITEMENT & SATISFACTION GUARANTEED!



1958 Century Resorter 19'...

225 HP Graymarine Fireball V8

One complements the other—Graymarine's new Fireball V8 engine and the 1958 Century "Resorter 19"—to give you the ultimate in boating thrills and pleasure. The Fireball's built-in stamina, inherent in all Graymarine engines, spells long, trouble-free engine life. Whether idling all day long at 400 rpm, or cruising at full throttle, the pleasure is yours in an inboard with Fireball V8 power.



2 MODELS:
225 and
160 hp
Fireball V8's

GRAYMARINE



GRAY MARINE MOTOR COMPANY, DETROIT 7, MICHIGAN • SUBSIDIARY OF CONTINENTAL MOTORS CORPORATION

Sapphire New Luxury Boat By Bee-Line

BEE LINE Manufacturing Company's new 16 ft sport run-about combines hydro-dynamic design with luxury construction, which the manufacturer believes is ahead of the trend in deluxe outboards. The patented fins are designed to hold the boat steady on sharp turns and serve as stabilizers on the straight-away. The 74 inch transom plus the fin construction is aimed at providing fast planing, smooth riding, and maneuverability.

The Sapphire's hull is of extra heavy laminated fiber-glass in white, with a wide choice of colors on the fins. Steering wheel is furnished in matching color, matched upholstery is optional.

Interior features are, a split front seat, wide center cockpit, and covered after deck with motor well. She is furnished complete with bow light, bow eye, bow cleats, bow handle, stern cleats, stern handles, stern light, step pads, rear view mirror, steering wheel, chrome trim, speedometer and wrap-around windshield. A photograph of the Sapphire appears on page 33. *Bee Line Manufacturing Company, 2411 Walker Road, N.W. Grand Rapids, Michigan*

Mac Bay Introduces New Line

SEVERAL NEW MOLDED mahogany plywood models are being offered to the public by the Mac Bay Boat Co.

A new 16 ft hull with a 74 in. beam is available in both outboard and inboard styles. The outboard is called the Ranger and is rated to handle large motors. The inboard model, the Ski-Mate, can be powered with engines from 70 hp through 125 hp.

Another hull, the 18 ft Surf Rider, has an 80 in. beam and will accommodate outboard motors only. The 15 ft Holiday utility outboard is aimed at the lower priced market. The 13 ft Thunderbolt and the 15 ft Imperial models in the outboard field and the 18 ft Pursuit inboard boat will be available as in previous years.

Inexpensive models by this company will appeal to the many persons who want a quality boat with good lines but without the more deluxe features.

Mac Bay is building a large addition to its modern plant to meet the anticipated demand for their boats and to permit future growth.

Mac Bay Boat Co., 5605 Airline Rd., Muskegon Heights, Mich.



The 13-ft Thunderbolt by Mac Bay Boat Company.

Sudbury To Show A Varied Line

THREE TRANSPARENT products are leaders in the Sudbury line of marine equipment. These are the 8-ft transparent boat, the transparent Sky-Vent, and the Air-Scoop.

The transparent boat first caught the eye of the boating public several years ago when its numerous uses became evident. As a dinghy it is easy to row and maneuver, will hold three passengers and still leave sufficient freeboard, can be hauled aboard with little effort, and can be placed over skylights without obstructing light. Another advantage is that it will take an outboard up to 3 hp.

Sudbury makes many other products that are useful to

boating people. One of the newest is a submersible bilge pump. With no metal parts (except for the motor, which is completely sealed off in a watertight compartment) the pump will not corrode or cause galvanic action (electrolysis). Even if tipped over it continues to operate.

Boat fenders made of plastic that are reported to guarantee perfect protection for gunwales and topsides are among other Sudbury products. The fenders are made of a frosted, pliable material that is long lasting and light enough to float. Prices range from \$1.98 to \$4.98.

Sudbury Laboratory, South Sudbury, Mass.



Sudbury's plastic boat fenders (left) are tough, long lasting, and buoyant. The submersible bilge pump handles 300 gph.

A Correction And An Apology

In the January Show Issue we published (on page 78) this picture of a Burger 75 ft cruiser with a caption stating that it was a 41-ft Safti-Craft. BOATS regrets that this error occurred. The Burger story, which should have appeared with the picture, is printed below.



Largest of the standard steel cruisers built by Burger Boat Co., this 75 footer is powered by twin GM 6-71 diesels.

THE BURGER BOAT COMPANY, pioneers in steel-hull construction, has added a 70 footer to its line of semi-custom flush-deck cruisers. A growing demand for large luxury yachts has produced 54, 60, 65 and 75 foot Burger models, in addition to the newest for 1958.

Burger hulls, all electrically welded, have four water tight bulkheads. Outsize tanks for fuel and water storage are built integral with the steel hull. Decks are teak, interiors and super-structures are generally Honduras mahogany, and interior plans are custom-designed and completed for individual owners. The yachts are equipped with heating or air-conditioning systems, hot and cold water under pressure, electric toilets and full size stove and refrigerator.

That the call for custom built luxury models continues, is evidenced by current construction of a 90 foot cruiser and a 100 foot ketch at the Burger yard.

In addition to its steel construction, Burger has embarked on an all-welded aluminum-alloy program, which has already produced two 58 footers during the past year.

Burger Boat Co., Manitowoc, Wisconsin

(Continued on page 13)

NEW SEAFLITE WHEEL



We answer all readers' questions directly by mail, getting the best technical advice obtainable to make our answers full and accurate. Those of most general interest are reprinted here.

Inquiries for propeller sizes must be accompanied by exact details of the engine. We must know the horsepower and the revolutions per minute at which that power is obtained; also the reduction gear ratio, if any, and as much detail about the hull, load and past performance as you can provide.

Power for Fisherman's Boat

S.S., Concord, N. H.

I AM PLANNING to build a 17 or 18 ft cabin cruiser this winter. I am a fisherman and am not interested in speed over 15 mph. Would like to use a new 10 hp outboard. I have plans for cruisers with 6, 6½ and 7 ft beams. Would a ten be satisfactory on any or all of these boats? I have to go up a river to my mooring, sometimes against an outgoing tide. There would be from two to four adults aboard.

Would a three-bladed propeller give me more headway than the regular two?

What is your estimate of the speed I would get with each of the three beams? Is a seven ft beam much more seaworthy than a six, and does it take much more power to push it? Would like to keep my cost of operation and weight as low as possible, and yet have a seaworthy boat with adequate power.

The boat with six ft beam is supposed to weigh 500 lb and the seven ft, 600 lb. My boat will be used mostly on the ocean.

It appears that you have been paying too much attention to beam dimensions and not enough to the specific type of boat you want. You state that the boat is to be used "mostly on the ocean". You also mention that she must be seaworthy. Yet you ask for 15 mph and mention a 10 hp outboard engine. Virtually none of these points add up to good practice. No 16-18 ft cruiser has any business in the ocean unless you pick a calm day and get back in harbor at the first sign of a storm. If you must face rough water you want the narrowest boat you can get. The boats you describe are certainly not going to run at 15 mph with a 10 hp outboard and four passengers aboard. All in all you are not selecting the proper type of boat for your purpose and we suggest that you consult a reputable naval architect for plans of a boat that will be correct for your conditions.

Removing Stain

E.I.B., Montreal, Que.

I HAVE RECENTLY stripped the varnish from my 18 ft boat and after several sandings it still shows definite traces of the old stain. I am afraid that the application of new mahogany stain will result in a splotchy appearance. How can I remove the old stain to clean wood? A scraper, aside from being a difficult job, will take too much wood off as I am getting too close to the countersunk screw heads.

You may get good results from the use of a varnish remover although there is considerable doubt about its success. Unless a trial shows that it will work, about the only thing you can do is to restrain the boat with great care so that the old stain merges into the new color. You do not say whether the planking is plywood or not. If it is plywood, do not attempt to do any scraping as you will destroy the outer ply.

DECKING A STAR
I JUST PURCHASED a used Star sailboat and the canvas deck needs replacing. In a previous issue you discouraged the use of fiberglass on the deck. I have had good results on bottoms but have been told that it makes the deck too stiff, that the deck should be able to flex. Is this true? Also that deck canvas should not be cemented down. My deck is made of cedar tongue and groove strips.

Some of the framing around the cockpit of 1 in. by 2 in. wood has to be replaced due to rot. What is the best type of wood to use?

Remove all the old canvas, sand off all rough spots and recover with 8 oz. canvas laid in marine glue. Follow the directions on the glue can, using the same steps that would be correct for recovering a canoe. After the glue has set thoroughly, dampen the canvas with fresh water and immediately give it a coat of paint. If possible, avoid more than one coat. Don't worry about the flexing of the deck.

We assume that the parts you must repair are not finished bright. White oak will be the best wood for such replacements although long leaf pine can also be used. If the parts are to be varnished, the material should be the same as that removed.

Whistle Nuisance

H.D., Paterson, N. J.

I OWN A 26 FT sea skiff with 9 ft beam, 185 hp Interceptor motor, hydraulic control.

I hit an obstacle and smashed my propeller, bending the shaft and also bending the strut. The yard man had the shaft straightened and said the machinist did a first class job. He guaranteed it not to be out .0005 of an inch. Upon installing it, he said he had to shim the strut to realign the bearing.

Now the boat operates without vibration but I get a whistle whenever I turn my steering wheel to the left, not to the right. Can you suggest some corrective measure?

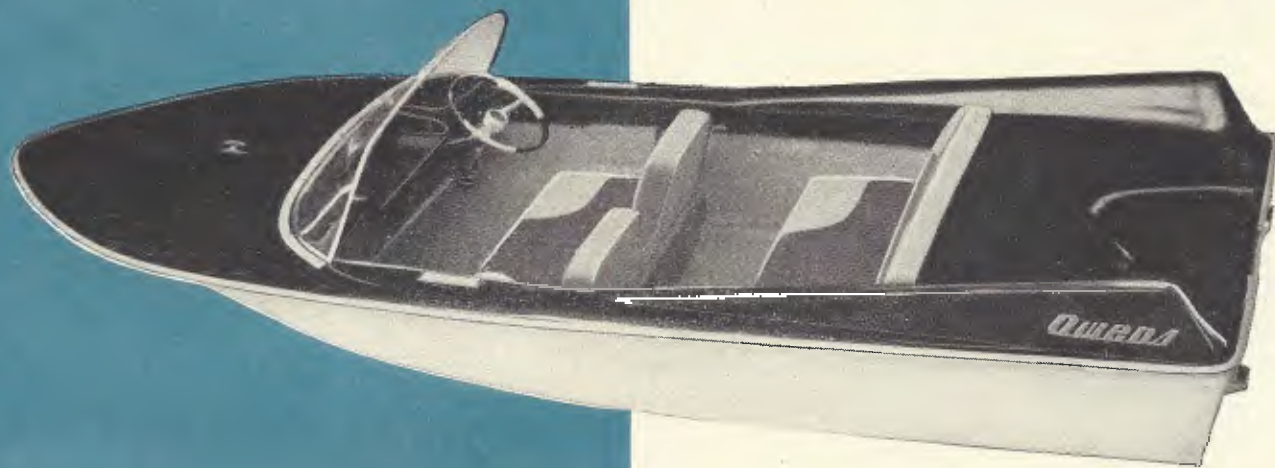
If the shaft is now properly aligned you should get no appreciable vibration and excessive bearing wear. According to your report that is true, and your only complaint is that you get a "whistle" when the helm is put over in one direction. Frankly we don't know where the noise is coming from but unless it results in vibration or other sign of mechanical trouble, we would learn to live with it. In other words, we do not believe that it is anything serious. If that were the case, other indications would show up. We would suggest that you have an assistant crawl around in the boat at such time as you get the noise. A hand placed on the strut bolts, the rudder post, tiller and tiller lines might show up the location of the noise. It might be a slight bend in the rudder blade or even a badly nicked leading edge of the rudder.

Finishing Plywood Hull

R.H.S., Brampton, Ontario

I AM BUILDING a boat using a molded birch plywood hull, made in Nova Scotia. I would like your help on some gluing practice. Some people I have talked to say that I should give the hull two coats of clear sealer before doing any gluing or wood work. I would like to know if the glue would penetrate the wood if this is done. Also, would like to know if a wood preservative should be used first and if gluing can be carried on over the preservative.

You are probably talking of glue of the hard-setting type used to hold parts together. "Marine glue" does not have adhesive properties but is used to keep joints watertight. We cannot recommend hard-setting glue unless used as an auxiliary to the regular fastenings. In that case, apply it before any sealer or other coating. If you are using a wood preservative that, too, must be applied to bare wood. A sealer is simply to smooth over the wood before the final painting.



she's the all-new

OWENS FIBERGLAS "14" deluxe SPEEDSHIP®

When you combine generations of boat-building savvy with the newest boat-building material, the result should be spectacular . . . and it is! In this "14" Speedship, Owens brings to Fiberglass boating new strength and durability, new beauty and luxury, new high-speed performance with maximum safety and handling ease. With outboard power up to 40 h.p., she's unbeatable for skiing, fishing, speed-boating . . . for carefree years and years! Her low price is another triumph of Owens' *revolution* in boat building . . . only **\$895***, equipped with everything but motor.

- 1-piece, friction-free HRV hull, designed with inherent strength for safety and speed, smooth behavior in rough water.
- Hull bonded to 1-piece deck with high-style fins, self-bailing motor well.
- Non-tripping chine for safe turns even at top speed.
- 2-tone weather-proof colors permanently molded-in.
- Styrofoam flotation built-in for safety.
- Deluxe auto-type upholstered seats for 4 to 6 people.
- Windshield, steering, bow light, lifting handles, cleats, step pads, automatic bailer, utility tray, other features included.



Owens Yacht Co., Inc., P. O. Box 4051, Baltimore 22, Md.
*Delivered U.S.A., through Owens dealers only. State and local taxes extra.

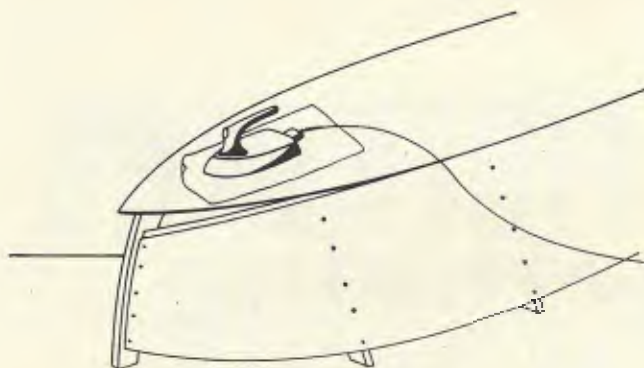
SHIP SHAPE and Bristol Fashion . . .

BOATS pays \$5.00 for each idea and rough sketch or photo accepted as a novel and useful idea for boatmen. Send your ideas, gill-hickies, gadgets and bright notions to Ship Shape Editor, BOATS, Milford, Connecticut.

Shaping Plywood

Contributed by BRUCE SNOW, Wellesley Hills, Mass.

TO BEND THAT PLYWOOD around the bow of the boat you are building, try steaming it. You don't have to be a professional boat builder, or to have an elaborate steam box. All you need is an electric iron and a damp cloth. Place the cloth where the greatest bending should occur, and apply the iron with slowly increased pressure. In this way, you can get the curve you want with little danger of splitting the plywood.



Using damp cloth and electric iron to bend plywood

Protecting Spark Plugs

, Dallas, Texas

CARRYING SPARE PLUGS for my outboard had always been a problem; it was difficult to keep them clean and prevent cracks in the porcelain from their knocking together. Recently I purchased some plastic cylinders used by druggists for pills. These containers, with their slip-on plastic tops, are ideal for holding spare plugs.



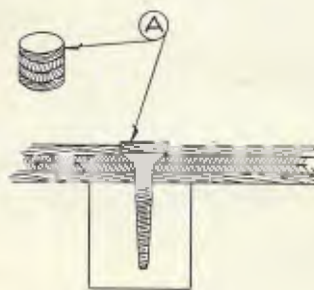
A plastic case protects spare spark plugs, whether in an open boat or a cabin cruiser.

Plugs for Screw Fastenings

Contributed by Donald Vanderveer, Brooklyn, N. Y.

WHEN WORKING WITH marine plywood, it is often difficult to get a good natural finish if large fastenings are used. The screw head, or the compound covering it, appears unsightly. If the screw hole is plugged with wood, the completed work can be perfect, even when finished with clear varnish.

screw-mate. Then drive the screws so the heads are almost one ply beneath the surface. With a plug cutter, cut plugs from scraps of wood left over from the job. Then carefully slice off the top ply. Place this thin plug over the screw head, using waterproof glue. Sand smooth before staining or varnishing.



The top ply (A) of plug cut from plywood can be set in glue on top of counter-sunk screw.

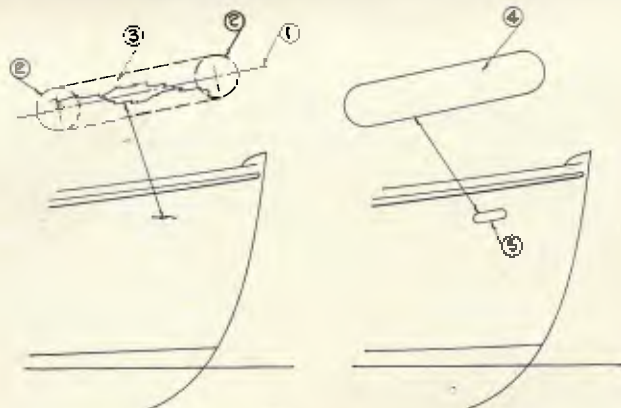
A "Dutchman"

Contributed by RAYMOND MILLS, Windsor, Conn.

MY METHOD OF putting in a "Dutchman" that any unskilled boatman can make eliminates all the errors that might occur when using the conventional method. I believe this improved process results in a "Dutchman" that will defy detection. Try it. Here are the few simple steps to follow:

1. Draw a center line through the defective wood.
2. Drill a hole sufficiently deep at either end of the defect, using a drill or bit the diameter of the greatest width of the damage.
3. Chisel out the wood between and tangent to the holes, keeping the outside edges parallel and square.
4. Select a piece of the same color and kind of wood, round the corners on a jig saw, or if small, draw over sandpaper on a flat surface.
5. Using waterproof glue, hammer the piece in place. When dry, plane and sand flush. No fastening is required and the driving fit of the "Dutchman" will not split the wood as the stress is evenly distributed.

It is the straight cuts across the grain, the corners and the fastenings that show so plainly in the conventional repair.



In making a "Dutchman," (1) is centerline through damaged portion; (2) and (2) are drilled holes; (3) is damaged wood; (4) and (5) show "Dutchman" as fitted into shaped hole.

Protecting Flashlights

Contributed by STANLEY CLARK, East Bradenton, Fla.

WHEN A FLASHLIGHT is needed around a boat, it's generally needed badly.

To prevent leaky batteries from corroding the inside of the flashlight case, and to make withdrawal of old batteries easy, wrap them with a layer of wax paper before inserting in the barrel of the flashlight.

Remote Control Radiotelephones

RAY JEFFERSON INC. announces a completely new model radiotelephone. It has a rated power of 150 watts and operates on ten channels in the marine radiotelephone band of 1600 through 3500 kcs. Among the latest features is remote control operation that includes channel changing, deck calling, and an intercom unit. Also incorporated are automatic noise limiter (squench) and modulation limiter to comply with F.C.C. regulations.

The company also announces improvements in its radio direction finder. A new null and tuning indicating meter is now used to provide easier-to-see readings. Additional band switch sections and tuning condenser allow the channels to be independent from the main tuning condenser. The end result allows fixed tuning of the channels without tuning adjustments, making it easier to get quick bearings on other boats. Other features of this direction finder include a three band operation of 6, 12, 24, or 32 volts using a separate power supply and a dynamotor and a beat frequency oscillator.



Ray Jefferson Model 6150 radiotelephone.

New Sperry Gyro-Compass

SPERRY'S NEWEST and smallest Gyro-Compass, 9 in. high with a diameter of 7½ in., and weighing only 12 lbs, was announced in January and displayed for the first time at the National Motor Boat Show in New York. The manufacturer states that despite its small size the new instrument is extremely efficient and holds fast to headings even under conditions of extreme motion as a result of heavy seas.

Other Sperry navigation instruments are new "True Tracking" and "Off Center" radars, the Sperry Gyrofin ship stabilizer, Direct Reading Loran, and the well-known "Maggie" automatic pilot.



Sperry's new gyro-compass is only 7½ inches in diameter.

"See-for-Yourself" Test gives you

PROOF POSITIVE VINELAST STOPS FOULING BETTER

than any other bottom paint—bar none!

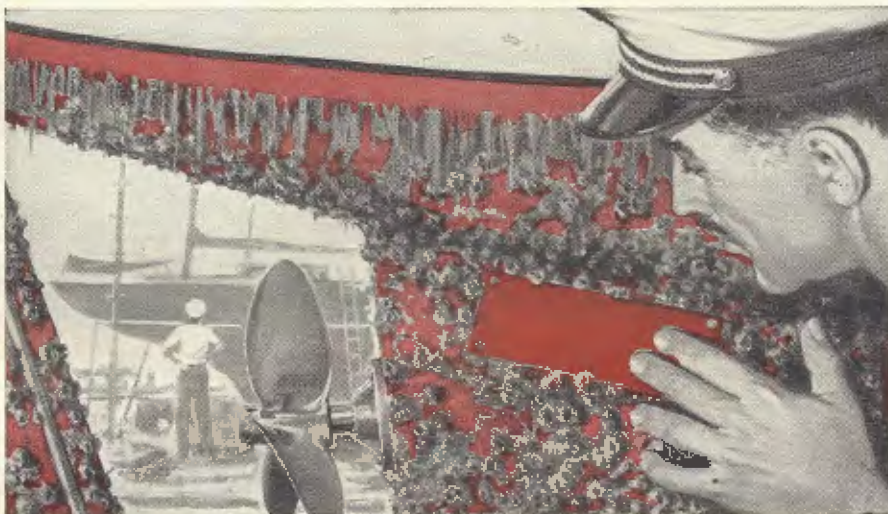
Never Before Has Any Paint Manufacturer Dared Make Such An Offer! **You Make the Test, You Judge The Results—And Next Time, You, Too, Will Paint With "Vinblast" Anti-Fouling Racing Finish!**



1. Simply mail coupon below, and we'll send you, without cost, a small panel painted with "Vinblast."



2. Fasten the "Vinblast" panel underwater to your hull, keel, rudder, or any other submerged surface.



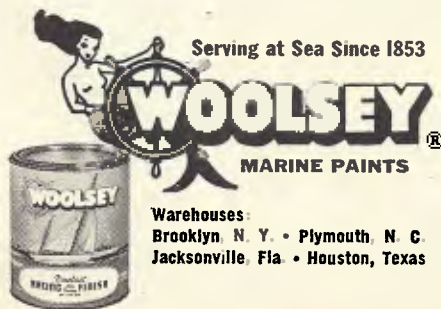
3. At next haul out, compare the condition of the "Vinblast" panel with the surrounding area. You'll see for yourself that "Vinblast" stops fouling better than other anti-fouling compositions, regardless of cost.

WHY THIS OUTSTANDING PERFORMANCE? Every anti fouling paint releases a toxicant to repel attachment of barnacles and other fouling marine organisms. The best of these toxicants is copper oxide and, thanks to a special Woolsey developed plastic resin vehicle, "Vinblast" is able to hold 400% more copper oxide than ordinary anti-fouling paints. The result is season long protection against fouling and

borers—increased speed and RPM and decreased fuel costs due to lessened hull friction "Vinblast" is excellent for all types of boat bottoms—wood, fiberglass, plywood and metal.

If you haven't already discovered "Vinblast's" superiority, make the panel test and see for yourself what you're missing!

Mail the coupon today.



Dept. B2
C. A. WOOLSEY PAINT & COLOR CO. INC.
205 East 42nd Street, New York 17, N. Y.

Send me a Vinblast "See for Yourself" panel:

Name _____

Address _____

City, Zone, State _____

(Panel will be mailed first week in April)



WHICH COMES FIRST—BOAT OR HOME?

An Editorial

IN THESE WINTER DAYS of dreaming about that great center of family life—the boat—more than one conversation is turning on the question of can we afford the new motor? Shall we get new tanks? What about recovering the leaky decks? How about a new dacron genoa jib?

There are, sad to say, also homes. They need repainting. They have roofs that would like to get re-shingled. There are even needs for washing machines, dryers, and crushed ice chunkers. A new rug for the threadbare article in the living room would go real good. And some subversive soul mentioned the possibility of a new car, dreadful thought!

In any sea-going boating family anything that isn't for the boat is really subversive and against the public interest. You just don't budget boat things—you buy them and somehow they are the most painless bills one pays. The best way to handle them is just to shuffle them in among the household bills when you're in a check writing mood. The mixture, this way, seems palatable.

There are of course those fortunate families who live on

their boats the year round. There are those lucky dogs who have retired and ease out the day in deepest winter with a long drink on the after deck.

But for the rest of us lowly mortals who toil away in stinking offices dreaming of that cruise next summer, waiting for the weekends when it's fit to go down to the boatyard and grab a hunk of sandpaper, we just have to grin and bear it.

This winter we did meet one fortunate family who had reached a really wise decision. They had long wanted a garage in their house. So for the last two years our friends have been quietly building a boat in their cellar. But there wasn't quite enough clearance to fit the finishing strip on the stem. So in came the men with sledges and whacked down the cellar wall. This made a perfect entrance to the future garage, permitted finishing the stem, and above all provided a much needed exit for the boat.

Well, they solved it; and there they are in the picture, proving for all time that you can have your house and eat it too.

A. S.

Sunset*



* One of Pettit's new hull and deck colors formulated for maximum marine protection and beauty



PETTIT

marine



paint

PETTIT PAINT CO. INC., BELLEVILLE, NEW JERSEY — SAN LEANDRO, CALIFORNIA



it's your money ...and how a Universal respects it!

Universal owners don't dig down as often for it. Not for fuel-buying dollars. Not for service. Not for parts. Not for early engine replacement.

These are inherently *marine* engines. In a boat is the only place you'll see them. They have all the design "extras" this service calls for—all at regular popular prices!

This time, take aboard a friend for life. A Universal. Modern models, up to 340-cubic-inch displacement. 225 to 12 h.p. Exactly what you want. Just what you need in true-marine electric plants, too.

for 1958

Brand new for you!



Mail coupon for this helpful, illustrated bulletin on the complete Universal line. Ask for literature on the new action-packed 225 h.p. Universal V-8 Marine Engine. It is sized to fit your boat and, best of all, it is priced to fit your pocketbook. See it...and all 1958 Universals...at the Boat Shows!

 *
 *
Universal
 *
 *
 *
of Oshkosh
 *
 *

 MARINE ENGINES • ELECTRIC PLANTS

New York Sales & Service—
154 Pilot St.,
City Island, New York 64, N.Y.
Phone: City Island 8-1900

Universal Motor Company, 25 Universal Drive, Oshkosh, Wis.

- ☐ Send me your new full-line folder showing all Universal models.
- ☐ Also literature on the new Universal 225 h.p. V-8.
- ☐ Send me "BOATS TODAY," the big, 133-page book of 151 modern boat designs. Here's my dollar to help cover costs.

Name.....

Address.....

City.....Zone.....State.....



Getting under way at nightfall. Whether the expedition is for hunting or fishing, or merely timed to reach an objec-

tive in the morning, it is important that running lights and navigating equipment be checked well before departure.

TIPS ON SUCCESSFUL NIGHT OPERATION

Running at night, whether by choice or from necessity, poses problems not encountered in daylight hours. Here are some points to be considered by the forehanded skipper

by ROLAND BIRNN

I LIKE TO RUN at night. That is, I like it under certain conditions, and provided there isn't so much night work that I get either very sleepy or fed up with the monotony of it. There are other conditions that make night runs distasteful;—and among them I would list the following:

1. Where driftwood is likely to be encountered. And that includes mooring buoys, floating islands of vegetation, and other impediments to bumpless and smooth travel. Driftwood is usually more plentiful after an extremely high tide or a freshet that may wash it off the banks of rivers or lakes.

2. Among unlighted shoals.

3. In waters where careless boatmen operate, or where people fish at night from small boats.

4. When threatening weather portends.

5. With a destination that is strange, poorly lighted, or otherwise difficult to identify.

Looks like I'm choosy. I am. But sometimes whether we like it or not we find ourselves running at night. Prepare for it in advance. Unfortunately, too little attention is paid to the subject in public instruction courses. Knowledge of those things that

affect night vision, of the meaning and recognition of lighted and audible aids to navigation, of the various types and combinations of navigation lights on other boats, and obstructions—all help you when you run after dark. Preparation of your own boat and equipment will also make the work easier, safer, and less harrowing.

Of the many unusual things that have happened to me afloat those that happened after dark have stuck longest in my memory. Like getting involved in a huge island of water chestnuts one late fall about 1940 in the middle of the Potomac River's channel opposite Quantico and drifting helplessly with it in the current for ten hours until daybreak. No, the anchor wouldn't penetrate the "island" and I couldn't buck out of it. Or suddenly finding myself surrounded by dozens of unlighted canoes near Key Bridge on the same Potomac after the finish of a Watergate concert, when the music-loving lovers were paddling home. Or stepping—not falling—overboard from a sailboat well offshore, with my sidekick snoozing below. Or giving way to a "sailboat" only to find it was a large motor cruiser with someone on deck obscuring the bow light and the dinghy on the deckhouse top cutting off the sternlight.

Obviously the most important navigation aid at night is the

lighted one, with the reflector-bearing aid next in importance. If you contemplate a night passage, it behooves you to review what you probably once knew well about lights but have since forgotten. Brushing up on the characteristics of lights in your local waters is also advisable at any time. The sooner the better. You never know when you'll be caught out at night against your will.

"Why carry lights on my boat?" you may say. "I only use it in the daytime." Brother, you never know.

Learn to count the seconds accurately. Chances are you can't do it now. But try this; count "one chimpanzee, two chimpanzee, three chimpanzee" etc. You probably won't have a stopwatch with you when you're running at night, to count the periods of flashing lights, and if you can't gauge a second's time you'll never be sure whether you're seeing a "Fl ev 3 sec," "Fl ev 4 sec" or "Fl ev 5 sec" light. If you do use a stopwatch keep count for at least five periods of a slow flashing light, then divide your clocked time by the number of periods observed. Otherwise you'll never be entirely accurate.

The Coast Guard's Light List may be all right for someone working offshore or coastwise, but it's superfluous for the inland bay and sound yachtsman. In the first place the nautical charts contain just about all the light dope you need. In the second place unless you receive the Notice To Mariners and post your list regularly with changes as they occur it will soon be obsolete. Also the publication is sometimes hard to get. I don't see why so many people and writers (are writers people?) keep harping about the Light List being a necessary publication for the average yachtsman.

If you expect to sight lighthouses it would be well to remember, or post, the formula:

$$\left(\sqrt[2]{\text{height of light} \times 1.15} \right) \text{ plus } \left(\sqrt[2]{\text{height of eye} \times 1.15} \right)$$

which gives the distance in nautical miles at which a strong light is first seen over the horizon. (Heights are in feet.) Light-

house visibilities noted on charts are for heights of eye at fifteen feet. Be sure to gauge your H.E. not above the deck but above the water.

By taking a bearing when the light first appears and applying the formula for distance you can get a fairly accurate fix. You will see the light—a light—before its characteristic signals can be studied, confirmed, and the light finally identified. So first note time and bearing of the suspected lighthouse and later, when you have identified it you can lay your position for the time of first sighting, on the chart; then work from there to the present on speed and time and course to get the distance you have run since "first sight."

Accuracy of night bearings

Twice recently I have made a fix 15 miles from the Anclote Keys Light near Tarpon Springs on Florida's Gulf Coast, with an accuracy that astonished me. Plotted bearings from several identified lights visible at the same time have enabled me to pinpoint my position when traveling mid-Chesapeake at night, making night piloting simple there except perhaps in rare October pre-dawn fogs. There are so many lights visible in Long Island Sound that it's often a job to isolate the ones you want. Look away for an instant and you have the same old trouble of finding the one you're seeking, hidden among the dozens and sometimes hundreds of other lights with somewhat similar characteristics.

In using very strong lights for a fix I have often been off about five miles or so due to my seeing the loom of the lights under clouds or strata of damp air before they should have been visible geographically. On the other hand, poor visibility will lessen the distance at which a light first appears.

Lights have both a geographical and a luminous range. The first depends upon the height above water; the latter upon the light's intensity. Important and large lights usually have a

When caught far offshore at sundown, the sudden flash of an identifiable lighthouse is a reassuring sight.



luminous range greater than their geographical one. That is, for clear weather. When the visibility is only fair, these lights have about the same luminous as geographical ranges. When the visibility is poor the strongest light may not be seen until it appears far above the horizon or, in extreme cases, almost overhead if you're in a small boat. Ship's lights are usually the reverse and have a much greater geographical visibility. Should you see a light or lights appearing and are not sure whether they're from a lighted aid or a ship or boat, duck way down thus lowering your height of eye. If there appears to be no difference in the sighted lights you may assume, within reason, that they belong to a ship or boat.

But never assume too much, especially in a situation where an assumption could lead you into danger.

Background lights ashore tend to drown out other lights on navigation aids, especially green ones, whose luminous range is always poor. If you have trouble in your local waters with a light's visibility, orient it with another prominent light. Coming in from the Gulf at Clearwater, Florida, for example, it's easy to pick up the flashing white light on the Little Pass outer sea-buoy. The next one is close on shore, three-quarters of a mile away; it's a flashing green light that's obfuscated by motel signs on the beach. But almost over this green flasher is a red pulsating light atop a gas tank on the mainland, two miles away, and local lads head for this until the green light becomes apparent. Even coming into a strange harbor or inlet at night, a study of the chart might reveal some substitute light, such as on a gas tank, radio tower, or flagpole.

Lights sometimes obscured

Like any unlighted aid in the daytime, a lighted one can be missing or the light extinguished. Obviously, this is more serious than is a missing day aid in the daytime. So proceed with caution. Skipper Lyman Hewins and I in his *Maid of Kent* were hunting the entrance to Nandua Creek one blowy night on the lower Chesapeake's lonely Eastern Shore. A weak green light marked the entrance but nary a green light could we see. Not until we almost socked the piling and scared several gulls away did the light show up. The gulls had been standing on a platform just below the light, completely obscuring it.

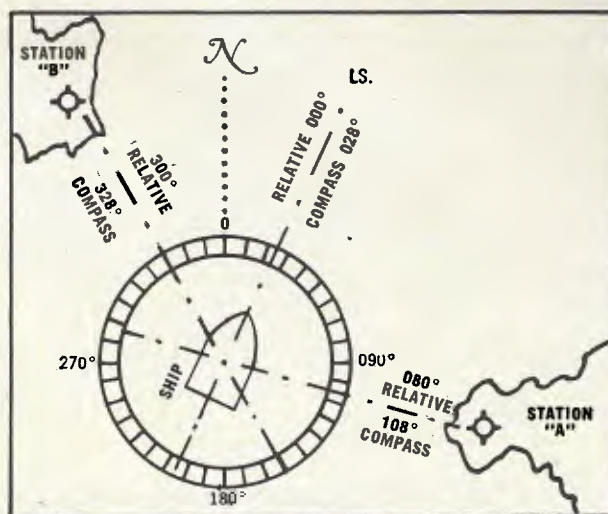
Within the past few years radio direction finders (RDFs) have become popular with owners of medium as well as large sized cruising boats. They are simple to operate and if you've taken the course in Piloting given by either the Power Squadron or the Coast Guard Auxiliary you'll understand their operation with little or no instruction. You tune in on the frequency of a radio broadcasting station or radio beacon. When signals are weakest as you rotate the dial your station's direction is indicated. Get two stations's bearings and you have a fix, where the lines intersect on the chart.

So far, we've been discussing visible lights. When none are visible owing to weather or distance you'll be wishing you had spent that \$175 or so for an RDF and had it with you. Ask your dealer; he'll probably have interesting literature describing its use.

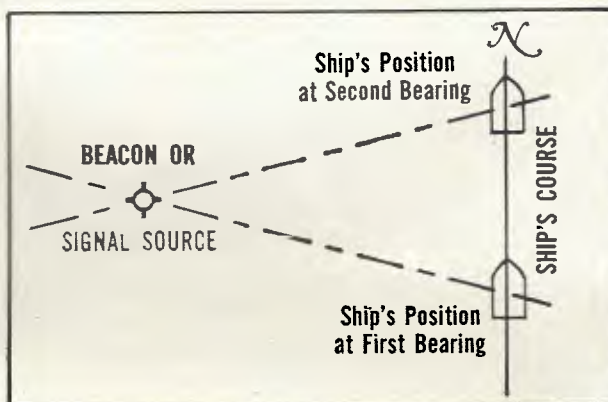
Lights on other vessels may not be correctly displayed. One night, many years ago, heading up the channel into Solomons, Md., we saw an excursion steamer, cabins and decks lit up like a Christmas tree, coming down the narrow channel and at dead low water. We ran along the channel's very edge. Looked like the steamer was coming head on, but slowly. Finally we made it out; the excursion boat was fast to the dock, bow pointed down channel and running lights lit.

The previously mentioned incident of a power cruiser being mistaken for a boat under sail alone illustrates how mistakes can be made by simple carelessness. Small boats not required to carry stern or running lights but merely to flash or display a white light on the approach of another boat seldom do so. Not only that, but too many small boats and commercial fishermen run at night and sometimes at rather high speed without any lights displayed, or they anchor in channels.

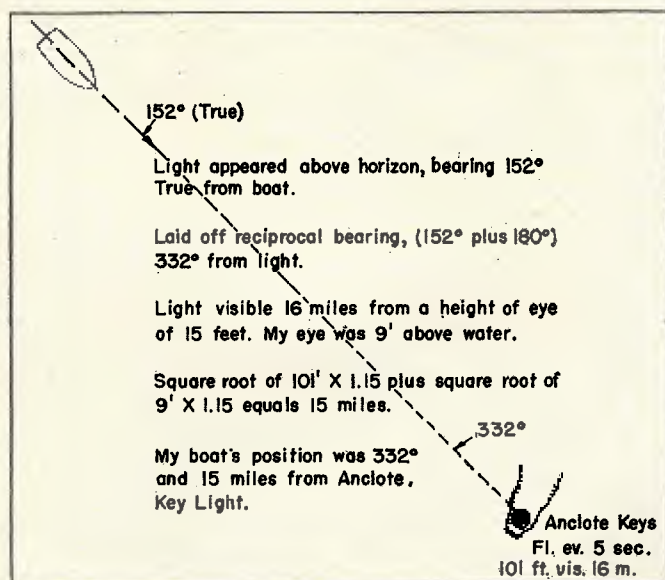
(Continued on page 44)



Use of the RDF. A fix by bearings on two transmitting stations (above), and by two bearings on one station (below).



A RADIO DIRECTION finder set aboard ship makes possible bearings from any fixed or mobile radio stations whose locations can be plotted. These include marine radio beacons, aviation beacons, coastal broadcasting stations, or even ships transmitting within the frequency of the particular direction finder set being used. The RDF can be used in a number of ways, including: homing, or running with the null dead ahead; a cross bearing on a visual mark and an RDF bearing; and RDF bearing and a depth recorder sounding; cross bearings on two or more transmitting stations; two bearings on the same transmitter and a measured run between them.



Approach to Ancote Keys light, as plotted on working chart.



The author's outboard cruiser "Westy II", which he built in 1957 from designs by Edwin Monk. He admits to a few short-

comings in planking and joinerwork, but concludes that reasonably competent amateurs can produce satisfactory work.

CONFESSIONS OF A HOME BOAT BUILDER

A skillful amateur takes a candid look at some successes and shortcomings

by CLAYTON W. MAYERS

I HAVE JUST finished building my fifth boat. She is roomy, stable, safe—and just the boat I wanted. I couldn't dream of buying a boat like this in the open market. She sure is one man's answer to the poor man's dream boat. But what I long to read in the accounts of home boat building are some of the mistakes, some of the things that went wrong. Some of the ways in which perhaps our backyard craft are not quite as slick as the professional product and why.

Does nobody else ever have any troubles?

Without dreaming of discouraging anyone from building their own craft I am hopeful that BOATS' editors will let me talk as one home builder to another. I want to put on the hair shirt and explain some of the points where, in my opinion, my work falls short.

My boat building has all been carried on here in my barn, which is not far from the rugged granite wall that keeps Maine from falling into the sea. It started about ten years ago right after I retired from work in the city. And strangely enough, my first shipbuilding job had me hammering away at what proved to be the most pretentious boat of the lot—a twenty-seven foot carvel planked cruiser of nine foot beam, and having all the fixings. It took me nearly a year and a half of my spare time (and most of my time was spare time then) to finish the job, working singlehanded as I had to do. I was, of course, a rank amateur at boat building, and I knew it. Chapelle's book

on Boat Building, and what little know-how I had picked up from reading BOATS, was my complete stock in trade. But I could handle wood-working tools passably well, having learned to saw to a line longer ago than I now care to remember.

Naturally, I was pleased with my first attempt at shipbuilding; and on that memorable day when my dream boat first hit the water, my many friends who had gathered to witness the exercises, applauded the results of my labors wholeheartedly. It was a great day for me.

But there were flaws in my boat—many of them. I knew where they were but I did not talk about them. And they are still there wherever the boat may be, for she no longer lies at my mooring. I sold her last year, and I was sorry to see her disappear around a bend in the river. And just why did I sell her? Well, is anybody ever completely satisfied with his boat? I doubt it. There are too many things that can come up to spoil the relationship. My trouble, contrary to popular beliefs, was not that I wanted a larger boat. In fact, it was quite the other way around. I had overstepped the bounds of my own peculiar boating limitations when I built a deep keeled sea-going boat, a mistake that caused me no end of headaches. My boat was too big, and she drew too much water. There simply was not enough water in front of my boat house, even at high water, to let me get my cruiser in and out of her winter quarters easily. It was always a case of wait for an unusually high tide, and tides can be so obstinate. That much

(Continued on page 48)

THE WORLD'S GREATEST YACHT CONTEST TAKES SHAPE

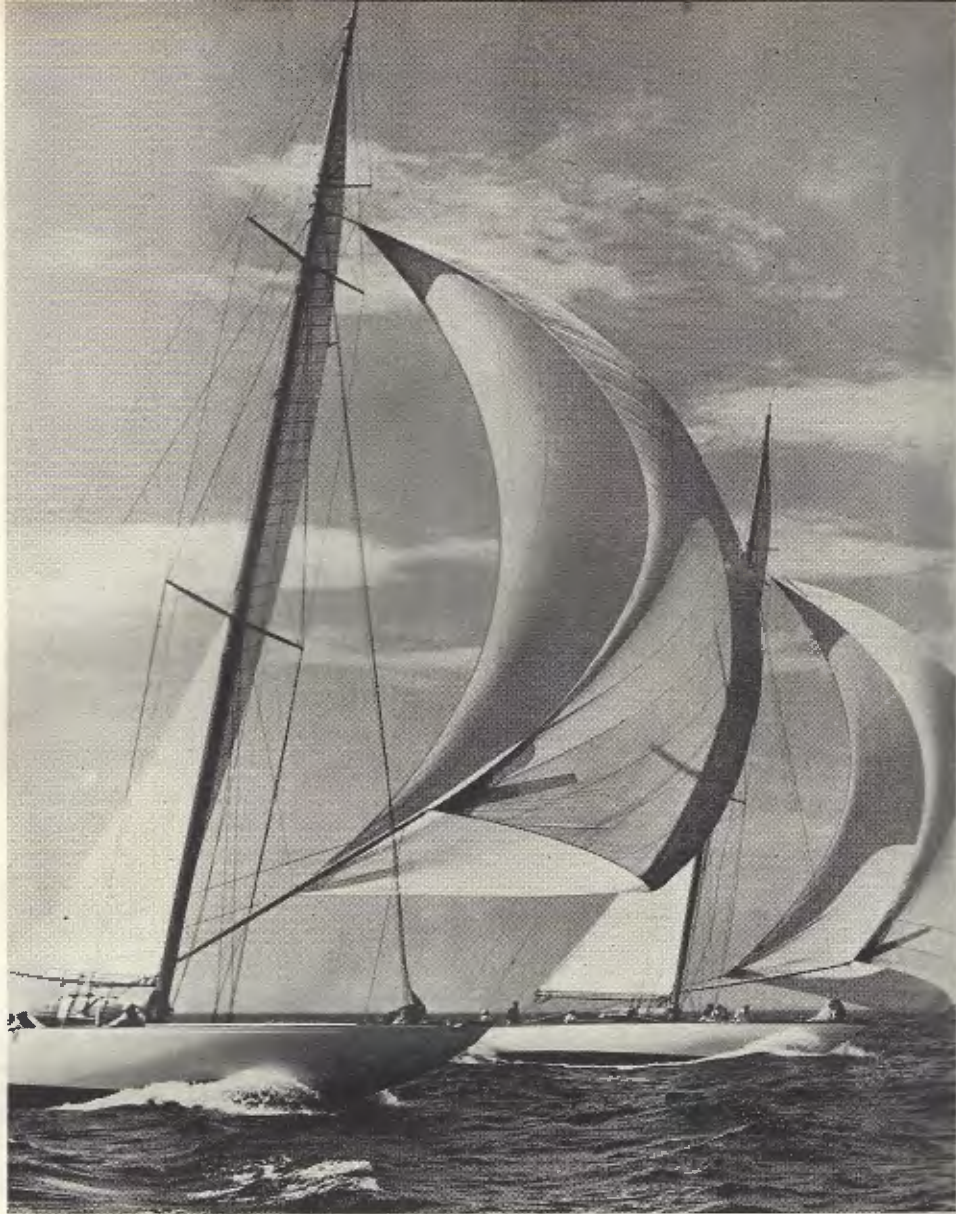
The series of races for the America's Cup, scheduled for September, will be preceded by a season of trials and eliminations to select a defender

by NORRIS D. HOYT

OF THE 100 TWELVE METER sloops built since 1908, when the International Rule was first formulated, the two that compete off Newport this coming September will probably elicit more lines of frantic prose than all the rest. Perhaps they will mean more; certainly they will cost more. Right now the ballyhoo, like the boats themselves, is merely in the formative stage; only the designers and builders have any notion of what they will be like. Most of the public who will follow them in September, now think dimly, if at all, of the America's Cup in terms of J boats.

The Twelves will certainly be different from the last Cup Defenders. The Js, built to the Universal Rule, were about 130 feet long, had a waterline of 87 feet, and spread a working sail area almost four times that of the Twelves. For example, where *Vim*, a Twelve, has a working sail area of about 2,000 square feet, *Ranger's* largest sail, her spinnaker, was over 18,000! *Ranger's* crew, on the last Cup Race, consisted of 20 or more professionals, an after-guard of six, and a few observers. Pictures of the last races show the decks, on a downwind leg, as crowded as the garment district at high noon. The Twelves, by the International Rule, may not have more than 11 aboard.

The new Twelves will be about 70 feet overall and 12 feet beam; they have a minimum waterline of 44 feet. Their maximum waterline can be but little more because, as Olin Stephens



Races for the America's Cup will be sailed this year in sloops of the 12 meter class. Here, two of the older "twelves" are shown on a spinnaker run.

wryly remarks, "Under the International Rule, the maximum hull would carry no sail at all, which would obviously be impractical . . ." Mast height is limited by the rule to 82 feet, ballast displacement ratio is limited, and various restrictions are placed on construction—with the intent that Twelves be "strong, seaworthy boats."

Historically, they have indeed been strong and seaworthy, and of the 95 built prior to 1955, over half are still being sailed, under one rig or another. Tentatively, in setting the final races in late September, the America's Cup Committee must either have had strength and seaworthiness in mind, or else have been dedicated to the task of driving designers mad, for (again I quote Olin Stephens):

"September is a transition month, when you can run into any kind of weather. The designer is thus forced into the position of making a guess on what he may run into, and hoping for the best. . . . Under the International Rule, there is considerable leeway in the dimensions of the boat, but if a designer wishes to build a very large boat, long on the waterline and carrying ample ballast, which logically should be fast in a breeze, he has to cut down rather drastically on his sail area, which reduces the propulsive power and speed to some extent under all conditions, and notably so in light weather.

"In this respect, the International Rule forces the designer to make a decision which is not nearly so critical under the Universal Rule, because as *Ranger* proved in 1937, it is possible to build a boat up to the maximum size that the Universal Rule allows and still retain sufficient sail area for light air."



"Vim" on the wind (above) and on a spinnaker run (below); was built before World War II, will be used as a trial horse in races next summer to determine which of the newer twelves will be chosen to defend the America's Cup. Designed by Olin Stephens and sailed by Harold Vanderbilt, "Vim" compiled an outstanding record in her active years.



So here we have an interesting proposition. Within the rule, the designer must get as much sail area as he can, and put it on a boat with maximum stiffness, if he is to sail in all September weather. Unless he cares to take a chance on reducing either sail or hull, the rule gives him only two areas for manipulation—the reduction of the factor “d” (difference between measured and chain girth, see diagram), and the increase of factor F (freeboard). As much fullness as he can usefully work into the reverse curve of the hull between the bilge and the keel will profit him in added sail area as well as added displacement. As much freeboard as he dares allow will also add sail area; and although the rule states that the sheerline must have “a fair curve,” it does not preclude a reverse sheer, or, for that matter, a whaleback. The new defender may, therefore, appear unconventional—but I doubt that it will.

Let us say, rather, that restrictions on scantlings and ballast-displacement ratios have discouraged the designers from using new materials, and that good sense and conventional taste restrain them from freeboard manipulation. It is likely, therefore, that they will expend their major effort in designing and testing experimental hulls; and this, indeed, we find to be the case.

British test eight designs

In Britain, a 12 man syndicate of owners had four British designers submit two designs each, and tested the resulting eight models against each other in the Saunders-Roe tank at Cowes. Variegated complications resulted from this procedure. One designer writes me, “I am happier with my normal custom than with a 12 man syndicate.” Another says, “The association between us four designers in the preliminary stages could not have been more pleasant and cooperative, although naturally each kept his ideas to himself.”

The final choice was made because final choices always have to be made, but only after soul-searching and “much computation and analysis by an independent practical expert.” His position was made difficult because “a wind speed of seven knots . . . showed Yacht A best to windward while Yacht B was best when running. If then a different wind speed was adopted, Yachts C and D might prove to be best to windward and when running, respectively.”

But the choice *was* made, and the British are now building. Their challenger is chosen, they are committed to their design, and are doing what they can with what they have. Mr. W. A. Crago, A.M.I.N.A., Tank Superintendent at Saunders-Roe, is sure, as a result of his tests, that “considerable progress has been made since pre-war days” when *Vim*, designed by Olin Stephens and sailed by “Mike” Vanderbilt, won handily in England.

Early choice unlikely

Meanwhile, in the United States the situation is still fluid. We need not actually pick our defender until one week before the Cup Races themselves, and even then, as before the last Cup Races, the defender will have the sail lockers of its fellow Twelves thrown open to it. The minimal kit for a season’s racing on a Twelve would call for two mains, four jibs, three spinnakers, storm sails, and a spinnaker staysail—about \$30,000 worth, on a boat that sets a maximum of three sails at once! Two days of heavy weather can make brutal inroads on light sails and pocketbooks, and the British boat will need to have more gear here than will ours in order to be self-sufficient to her single-handed challenge. In short, the challenger will be at an inevitable operational disadvantage—in the nature of the rules, in the circumstances of her choice, and in replacement of gear. If the British manage to win, it will be a gallant and a splendid victory.

Indications are that we’ll be well prepared to meet the challenge. Olin Stephens, who with Starling Burgess designed *Ranger*, has completed tests in the Stevens Institute Tank on a Twelve for Harry Sears and Briggs Cunningham. Phil Rhodes has been

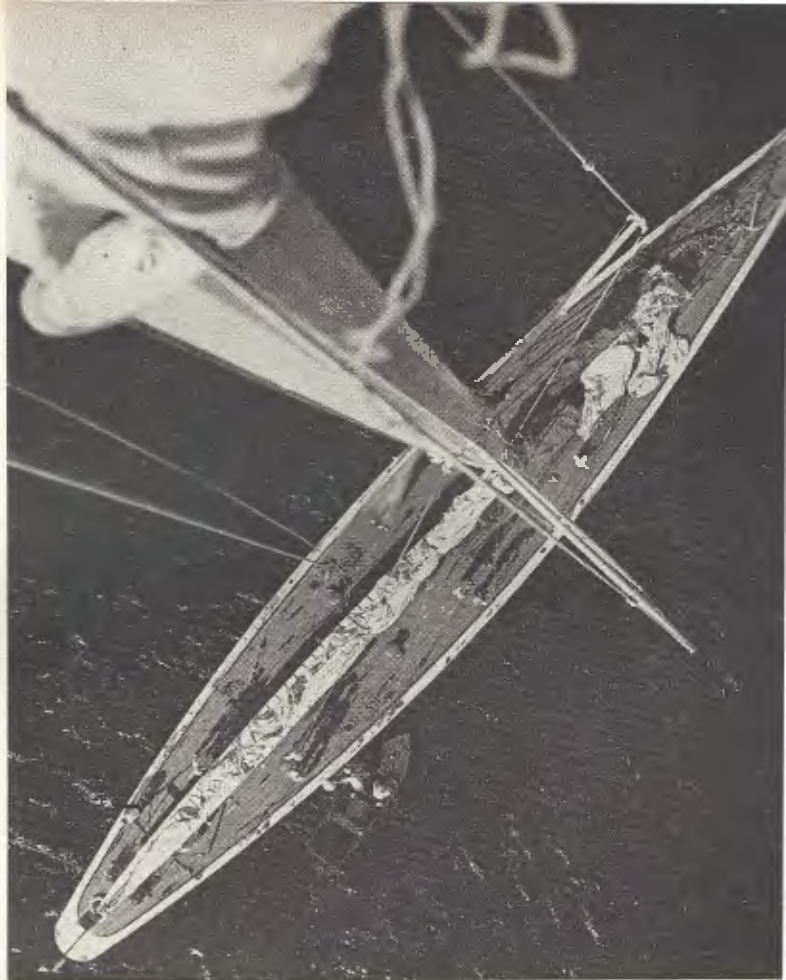
given carte blanche in formulating a design and picking a crew for the competition. Ray Hunt, designing for a Boston syndicate under Chandler Hovey, is rumored to have hit on spectacular improvements in hull design. All three boats will be ready for a summer of racing and developmental experimentation before the great choice is made. Further, we have the best previous Twelve, *Vim*, being readied for a season of trials with a new set of sails and a redesigned rig, as well as three other Twelves to provide competition. *Vim* and *Gleam* even served a laboratory term in the last ten days of September, 1957, in Newport waters. A British observer was aboard *Gleam*.

So . . . we'll be prepared. And so will the British. On the 20th of September, 1958, the two boats will meet for the first international duel in the Age of Socialization. Ours will have been selected after official trials in June, again in July, again in August, and finally in September. Theirs, selected in a tank, will have been tried out extensively in home waters and here—probably against all possible American representatives. And when they meet finally, all questions of design and equipment will have passed beyond debate.

Given reasonably well-matched boats, the organization of the afterguard and crew is likely to be the decisive factor. Although the boats will be smaller, the procedure will almost certainly resemble that of *Ranger's* last defense of the Cup. What, then, will it be like?

Imagine yourself on a boat the size of *Bolero*, or *Baruna*, though slimmer, lighter, and with a shorter stick. The flush decks stretch clean, from the deep cockpit to the bow; the mast and boom are aluminum, the sails synthetic, the sheets wire or synthetic. Below decks, the hull is remarkably open, with sails stowed, stopped, and coiled into large bins. Their sheets, color-coded with tape, hang over the bins in coils. Various strengths of stopping cotton, cut to length, hang in elk-skin straps from handy hooks. The water rustles along the hull as you sail out to the start.

The deck organization is a familiar one, for after all, the crew has been racing together since June, and now, on September 20th, they probably are more familiar with the sloop than with their own offices. Of the eleven, four will work in the cockpit area—the two helmsmen, the navigator, and the observer-

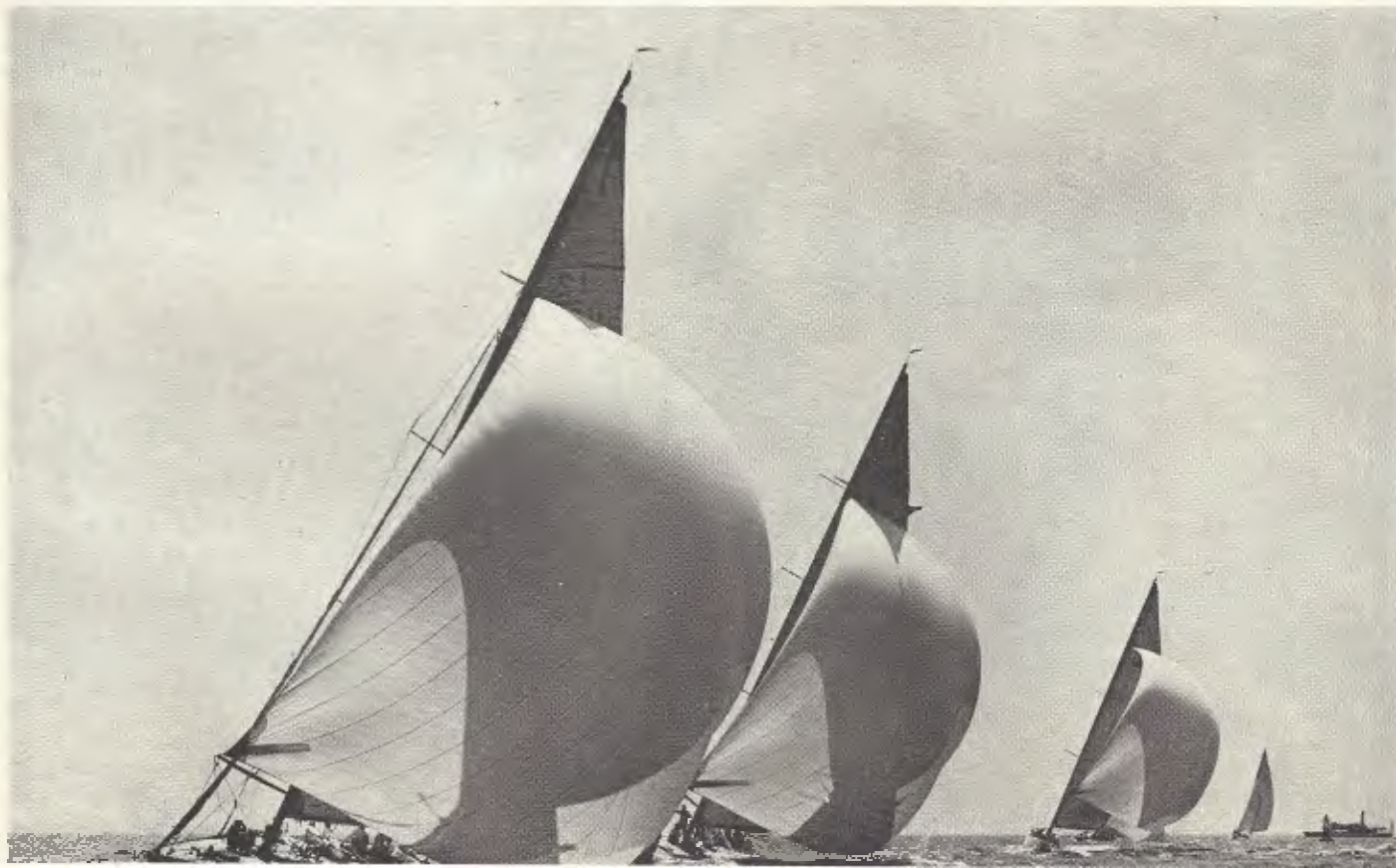


From the masthead, a J class sloop looked like this.

timekeeper. On the New York ship, for example, Harry Sears, Briggs Cunningham, and Olin Stephens will be the helmsmen, Ken Davidson may be the navigator, and the four will constitute the board of tactics. They'll also handle the main sheet and sometimes the runner backstay. In addition to Olin, the rest

(Continued on page 53)

Spectacular is the word to describe this picture of "twelves" on a spinnaker reach.





A Chesapeake Bay schooner designed by Howard I. Chapelle.

BOATS PRESENTS

A profile of

Howard I. Chapelle

THE UNINHIBITED ADVOCATE OF LOW COST SMALL BOATS

Designer, author, historian —

"Chap" has brought new dignity to many half-forgotten workboat types by publicly proclaiming their virtues and proposing that they be used as yachts

by SAM CHAMBLISS

ONE DAY in the middle of winter some years ago, I drove from New York to Cambridge, Maryland, to see a man about a boat. A ridiculous thing for me to be doing—I didn't have money to spit across the road about—and I also felt at the time that getting to be a boatsman was a real big deal. If you're going into something that's new to you, and safety is an important factor, you probably will try to figure things out as much as possible before jumping. It was the figuring that was hard.

I liked the idea of getting on the water and away from the mobs swarming all over the New Jersey, New York, and Connecticut area. But everywhere, in one boatyard after another, from salesman to architect to the man who once had a boat, I felt I was getting into a dog-eat-dog type of rat race where "let the buyer beware" became enormously meaningful. Perhaps if I'd had some experience I would not have felt that way; but being a novice, I was bewildered and doubtful.

So, when I drove down that narrow, muddy road several miles beyond Cambridge, past the faded sign with "Howard I. Chapelle" on it, and looked at the building half obscured by windblown spray on that dark, cold day, I wasn't feeling particularly encouraged about anything. Leaving the car, I was whipped by the wind chopping down across the tidal water, which froze on the shoreline barely three feet lower than the ground where I stood.

The door opened and I was led inside by a man a good deal taller than I—he must have been six-three. In better light, I shook hands with him.

Yes, the secretary at the boating magazine office had in-

formed me correctly; he (Chapelle) had done considerable designing of inexpensive boats, and yes, he would be happy to discuss them with me even though it might be some time before I could actually afford one.

He talked well, in thoughtful phrases. I confess that at first I was more interested in thawing out—there was a fireplace of great cheer—but suddenly, I was all attention. The man was saying things of interest: "... the difficulty in building an inexpensive boat is in finding workable designs. I don't say this to criticize the average yacht designer—he is aiming at the fashionable market—but the fact remains that most designers can't design a good cheap boat because they don't know construction well enough."

To me, such words were refreshing to hear. Everywhere else, there had been some sort of unwritten agreement among designers or salesmen to keep quiet about competing products. I have been told frequently, "This is the best boat, it is a new type of boat, a jim-dandy family boat," etc., but never could I get anyone to say one boat was better than another, within the same price range. Rather, I heard, "I can't advise you, you must make up your own mind," even though I admitted to them until I was black and blue in the face that I didn't know enough about boats to make up my mind. I asked, "What good is all your experience if you can't help a beginner, and further, if you can't make logical sense while you're about it?"

Chapelle, delightfully, was a breed of a different sort. A rare breed. The kind of man who wasn't too politic to speak his mind.

Since that day, in the four years between that conversation and the present, I've had several more talks with Chapelle. Each time, there's the feeling as I leave him that here is a man who isn't afraid to be himself or to say what he thinks. Chapelle

(Continued on page 54)



HOWARD I. CHAPELLE

At present engaged in a project for the National Museum, Smithsonian Institution, he demonstrates how the lines are taken from a half model of an early American sailing craft.



Panel on Education, under chairmanship of Captain Roberts.

Broad Education Seen As Answer By The NATIONAL SMALL BOAT SAFETY CONFERENCE

Measures to further safety on the water are planned at meeting sponsored by Coast Guard

by ALFRED STANFORD

TO THE FOURTH FLOOR of the Treasury Building in Washington last December came representatives of yachting organizations, the Red Cross, the Boy Scouts, the Army Engineer Corps, insurance companies, boating magazine editors, and representatives of the boat, engine, and equipment builders in answer to the invitation of the Secretary of the Treasury to a national conference on the question of small boat safety. Treasury called the meeting as the civilian boss of the Coast Guard, the agency charged with safety on Federal waterways, and at the suggestion of the Bonner Committee, which is about to report to the new Congress a bill that will substantially change the regulations now covering motorboats.

For two days it was a working session—with the intensity of the conversations continuing right through Ralph Klieforth's handsome reception at the Metropolitan Club and Admiral Richmond's Commandant's luncheon on the following day. The work of the conference was split up into panels dealing with: (1) equipment regulations and construction standards, and (2) accident statistics and educational aspects of the total problem of acquainting newcomers and careless old timers about the need

for safety on the water. Throughout the entire conference and the work of the panels, the tactful and expert guidance of senior Coast Guard officers steered the at times rambling discussions to lucid and interesting conclusions. Captain H. B. Roberts, USCG, and Captain C. P. Murphy, USCG, acted as moderators of the two panels with great understanding and fairness.

The outstanding discussion of the conference was the underscoring of the need for greater and quicker educational efforts than the excellent present program of the U. S. Power Squadrons, the Coast Guard Auxiliary, and other semi-educational yachting organizations can provide in terms of numbers reached. Statistics for 1957 released jointly by the Outboard Boating Club and the National Association of Boat and Engine Manufacturers indicate that some 35 million Americans participated in boating activities this past year. Everett Morris of MOTOR BOATING, joined by many others, pointed out the desirability of adding boating safety instruction to the school program—just as schools have incorporated safe driving as part of the required curricula. Other agencies that reach mass audiences, such as the Red Cross through its water safety program, and the Boy Scouts,

(Continued on page 56)

SOME LIKE THEIR CRUISING RUGGED!

Three Texans make an 11-day
dash from Houston to New York
in a 17-ft outboard boat

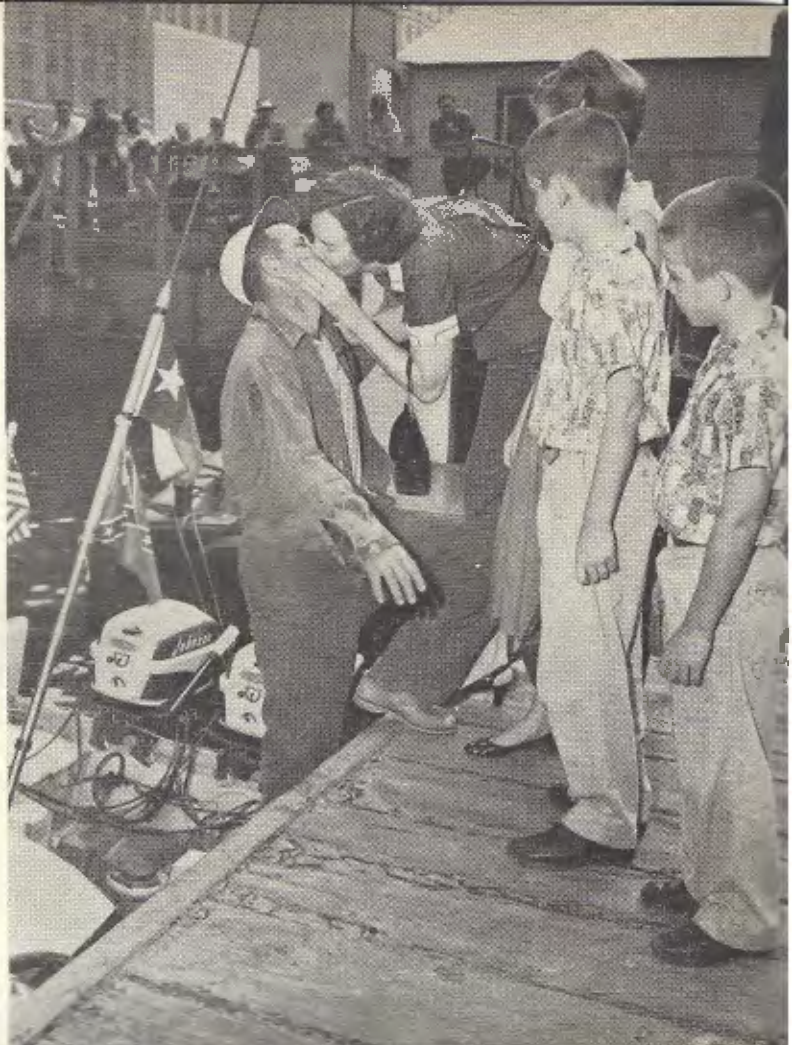
by RUSSELL TINSLEY

IT IS A LONG WAY from Houston to New York. No one knows that fact better than three intrepid sailors from Austin, Texas, who traversed the distance via outboard-powered cruiser last summer.

The treacherous 2,680-mile trip required nearly 11 days and nights, threading along the Gulf of Mexico coast, through Florida's maze of inland channels, and up the Atlantic seaboard. Times were when the going appeared bleak indeed but, as Henry Barnhouse matter-of-factly revealed, "We never once considered giving up."

There was, for example, the incident when the boat became hopelessly marooned on a mud bank miles from nowhere. The Texans were pushing the fiberglass boat at full throttle up the Matanzas River, about 40 miles north of Daytona Beach, Florida, trying to make up valuable lost time sacrificed earlier when they had paused to rescue two fellows in a swamped boat.

Beacon lights were obscured by the rising bow and showers of spray. The helmsman sighted a distant light and assumed it marked the channel. Actually, the marker was across the flats at another channel. He headed toward the light and before he

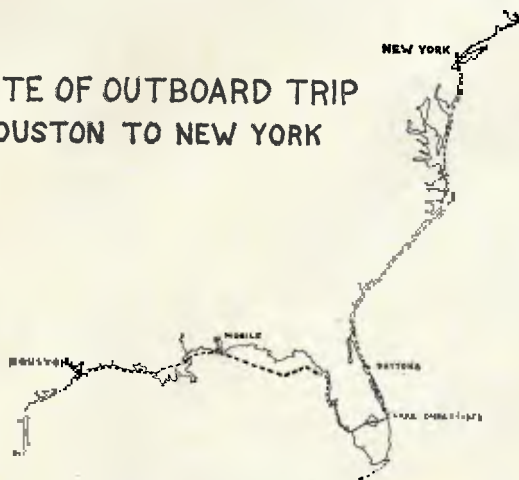


The family of Henry Barnhouse give him a warm send-off minutes before the start of the 11-day Houston-New York run.

Checking the courses before the start, Neill, Barnhouse, and Cloud (left to right) make a dry run of their projected trip from Houston to New York. The boat is a Glastron Seafile 17 ft long; the motors are 35-hp Johnson Sea Horses.



ROUTE OF OUTBOARD TRIP HOUSTON TO NEW YORK



Detours for fueling made total distance almost 2800 miles.

realized the circumstances, the boat had raced up on the flats, wallowing firmly into the tenacious goo. The trio couldn't budge it. Their only hope was to wait for the rising tide to float it free, which it eventually did an hour and a half later.

The record endurance run was a dream-come-true for Barnhouse, a self-styled sailor for as long as he cares to recall. He had been pondering the idea for four years and early in 1957 decided to do something about it. He recruited two other men, both enthusiastic boatmen, who worked with him in the composing room of the Austin American-Statesman, and together they started planning the longest non-stop outboard boat run in history.

What sort of guys would attempt such an imposing venture?

First off, there was Barnhouse, a 38-year-old linotype operator and maintenance man at the Austin daily newspaper. He admits that he has always had a hankering for adventure, especially when it comes to boats. When he decided to make the Houston-to-New York run, he was maintaining three different boats on the nearby Highland Lakes chain of man-made reservoirs in Central Texas. All were 30-foot jobs, two sail boats and an in-board cabin cruiser.

Charley Neill is a 45-year-old printer at the newspaper. He has an intimate knowledge of boats and boating. Twice he has floated from Austin down the Colorado River to the Gulf coast

The three crew members, Neill, Cloud, and Barnhouse, make last-minute check of boat, engines, and gear before departure.



in a canoe, and once he canoed from Port Isabel at the southernmost tip of Texas up to Corpus Christi, more than 125 miles away.

William L. Cloud, 50, is a cigar-smoking, balding linotype operator. He has been a boating enthusiast for most of his life and he was the sort of a fellow Barnhouse knew could be depended on, should the going get tough.

The foremost problem was selecting an adequate boat-motor combination that would stand up to the gruelling grind. Although much of the trip would be through inland waterways, there would be some traveling across open waters. A prerequisite for a boat, then, would be one small enough to be powered by outboard motor, yet sturdy enough to withstand the anticipated beating of sudden open-water squalls.

Barnhouse got a local boat distributor to sponsor the trip. After a detailed study of the proposed route, the distributor, Bill Gaston, suggested an experimental 1958 model Glastron Seaflite boat—fiberglass, 17-ft long, 76-in. beam, 35-in. depth and 63-in. deck length—powered by twin 35-hp Johnson Sea Horses. The boat was also fitted with panoramic windshield and sun canopy.

Estimated weight of the boat with passengers and equipment was 2500 pounds. It was outfitted with such accessories as cable steering, Bendix radiotelephone and depth finder, Airguide compass and speedometer, Attwood marine hardware, two 12-volt batteries, and all the gasoline tanks the boat could carry—five 18-gallon remote tanks, one 12-gallon tank and a pair of 5-gallon gas cans.

Meals served cold from cans

Except for a few hot meals grabbed at cafes near gas docks, the three ate entirely from cans, unheated because of the danger of fire with the heavy load of gasoline. Drinking water was carried in a 5-gallon can.

Prior to the trip Barnhouse tore down the motors several times and fitted them back together again, preparing for any in-trip emergency repairs which might be necessary.

The complete rig received its final checkout at Galveston on the Gulf coast. Because most of the trip would be through potentially rough waters, Barnhouse reasoned that the Gulf would be the most logical spot for the pre-trip trial run.

It was an exacting checkout. The rig performed superbly under simulated trip conditions. The ultimate test was on a course laid out in the open Gulf—a 120-mile trip from Galveston to Freeport and back, which was made at full throttle.

A seven-day journey was the Texans' hope, averaging 25 mph during day and 12 mph at night. They were shooting at a record set days earlier when two Miami businessmen traveled 2500 miles in an outboard-powered runabout from Miami across the Gulf and up the Mississippi River to Chicago in nine and one-half days.

Amazing thing about the Houston-to-New York run was that it was accomplished without any pre-trip fueling schedule. Initially, a large gasoline firm had agreed to sponsor the trip, but a week before the start the company informed the crew that fueling points couldn't be organized before the proposed trip. The only alternative, then, was to refuel on a get-where-can basis. Overall, this haphazard refueling plan worked surprisingly well. Only once, in Pensacola, Florida, did they have to wait for any length of time to get gasoline.

It was a quiet, hot Monday morning, July 29, when the boat was eased into the Houston ship channel. A large crowd of reporters, photographers, and well-wishers milled around the ramp to see the three off. At 11:08 a.m. the motors were fired and the trip was no longer just a dream.

Disaster almost befell the trip before it got well started. Soon after departing the ramp, the boat came within inches of splintering on a log floating in the channel. Barnhouse sighted the half-submerged limb when almost upon it, and veered away, barely averting a major smashup.

Carefully following a pre-marked route on Coast and Geo-

TWO BOTHERSOME JOBS MADE EASY

Patching the unpatchable; and attaching a vibration plate to a fiberglass transom

by V. LEE OERTLE

CELASTIC is a plastic-like material that has been used in such time-tested places as the decks of ocean liners, in heavy industry, and now is finding a niche around the home, shop, and boat. In small sizes it is handled much like a tire patch. Cut it into squares, strips, or any shape required for covering rips and holes in canvas fabrics, or even plastics, which are difficult to glue, often impossible to stitch. In addition to this, the stuff will make repairs over metal, wood, glass, and other surfaces that need a

hurry-up fix job when far from home.

Cut the celastic to size with scissors, knife, or razor blade; dip it into the special solvent. Lay the moistened celastic patch over the area to be repaired and smooth out the edges with finger tips. Be sure to overlap damage for a good water-tight seal.

A celastic repair kit (including solvent) is available at hardware stores for about one dollar, or direct from the Woodhill Chemical Company, 1391 East 33rd Street, Cleveland 14, Ohio.



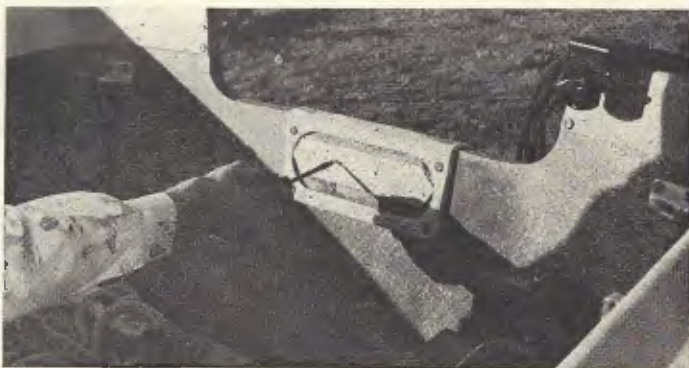
It is not practicable to sew patches on plastic-covered boat cushions; but celastic bonds well and holds edges together.



Dip celastic patch in solvent, apply to torn area, smooth edges. Weight on patch over night ensures tight bond.



To reduce wear on transom pads, replace the masonite block with a piece of 1/8 in. or 1/4 in. thick aluminum plate. As shown above, mark the plate for fit inside the rubber protector pad



and cut to size. Dig out all old wood or masonite. Spread plastic aluminum or metal adhesive on pad (to absorb vibration). Press pre-cut aluminum plate in position.



Bore through plate and rubber pad, and just break into surface of fiberglass transom. Use countersink to ensure flush



apart will keep plate rigid. Using aluminum protector, motor clamps can be turned up more firmly without damage to

SEAMANSHIP IN HEAVY WEATHER

Certain fundamental principles apply, but each boat responds differently to adverse weather

by PETER STANFORD

THE FIRST THING a good sailor learns and the last thing he ever forgets is a deep respect for the sea and the wind. These elements can be hostile. They can turn savage suddenly, or with deceptive slowness. It is important to know how to handle your boat safely in bad weather, however it happens, in the course of a 'long-

shore passage or in an afternoon's outing. No one ever learns all of this art. Good sailors keep making discoveries.

The principles that are helpful to any small boat skipper when bad weather hits are simple ones. They involve knowledge of your boat, of the waters you sail, of your own abilities—but most of all they involve the ability to keep learning from the situation as it develops. A good skipper

keeps thinking his way progressively through a tight situation. One step at a time is the way you move toward a desired objective when the conditions turn against you. This one simple principle of helping your boat patiently and deliberately to work her way through wind and sea is worth pages of theory.

Any good sailor of experience will admit to being frightened at one time or another by bad weather. When deep calls unto deep, in a three-day gale in the North Atlantic or in an afternoon thunderstorm a half-mile from shore, an elemental situation comes into being—the situation of a man and his boat against the sea. It is part of an ancient story, one that was old when St. Paul's sailors dropped anchors on an inky, howling night in the Mediterranean two thousand years ago and prayed for the coming of the day.

I have been frightened by the sea on many occasions. I have been through trying hours on the North Atlantic, the English Channel, the Bay of Fundy, off the coasts of Spain and Georgia, and in Long Island Sound. I can summon up a whole geography of occasions on which I have been much or a little frightened. I can do this merely by listening to the wind on a rainy night, such as it happens to be now while I write this. I would therefore like to set down a few of the old and trusted principles against a background of personal experience, so that what is written will ring true for the skipper who is in a situation where he must take thought for the safety and well-being of his vessel and her people.

The Skipper is in command

It is important at the outset to establish this threefold identity of the skipper, the ship, and the crew, I think. The destinies of a ship and her crew are bound up together. But it is the responsible attitude of the man in charge that is the foundation of any vessel's safety. The whole crew may be called into council to discuss where you will go or what should be done next, but the skipper's decision is final. He is responsible and must answer for the vessel's safety.

It is important that he know the capacity of his boat and the equipment she carries. It is important that he know the experience and ability of his crew. It is an important part of his responsibility as skipper to know what resources he has and to understand how to get the best out of them. But it is still more important that



Avoid taking wind and sea on the beam (above). This exposes the boat's weakest point to the full power of the sea. Head into wind and sea (below), or away from them, and at an angle.



Sailboats frequently ride best stern-to the wind and sea, with a small steadying sail set forward (below). Repeated trials will show angle at which boat rides most easily.



he know himself. In the last analysis the safety of any boat lies with the way her skipper handles her. This, in turn, depends to a great extent on how he conducts himself.

A good skipper, for instance, is always ready to experiment, to make up new answers to problems as they arise. If he is caught in a situation with a sweeping sea where his boat will lie safely only to a sea anchor, he will be able to improvise and set out an effective sea anchor made of a sail or an awning bundled around a pair of oars, weighted with ballast or an anchor. This kind of improvisation may sometimes be needed. A good skipper who is always looking for trouble is much more likely to be ready for trouble when it comes. The sea has nasty ways of taking people on a more direct and final evaluation than they may have encountered or got by with ashore. It is foolish to go on the water with a skipper who ties up the safety of his vessel with careless bravado, a tendency to mask ignorance with hasty action, or other serious flaws in his own personality.

This idea of direct personal responsibility may seem antique in our protected society of today, but it has not been outmoded at sea. In a direct way, the principles of handling small boats in bad weather sharpen and define those areas of the skipper's responsibility that always exist.

Rule 1. Know Your Boat

Boats vary widely in the amount of bad weather they can stand up to. What is serious heavy weather for one boat may be nothing extraordinary, at the moment, for another. An ocean racer may welcome the same rail-down breeze that sends smaller craft looking for shelter. But this is an obvious contrast. There are more subtle differences between various classes and types of boats. It is important for you to know what your particular boat can and cannot do.

To take an obvious example, a rowboat should not get far off the beach in an offshore wind of any strength. It may prove impossible to row back against the wind. But, equally, a heavily engined open launch may find herself in serious trouble in a tidal chop where a rowboat, although wet, would at least stay above water. These are situations that can be met and that can produce serious boating trouble on a bright, sunlit day. These things have happened.

There is always some range of choice in what you ask your boat to do. A good skipper knows his boat's limitations well enough to avoid putting her in a situation she is not meant to cope with. He judges every boating situation by his knowledge of what his boat can do, rather than by a careless general acceptance of what the weather looks like as he sets out.

Sometimes, trouble comes uninvited. Then it is doubly important to know your boat's actual heavy weather performance.

It is important to know not only her limitations, but her strengths. This is the foundation of good boat handling: you work from your boat's strengths to insure her safety.

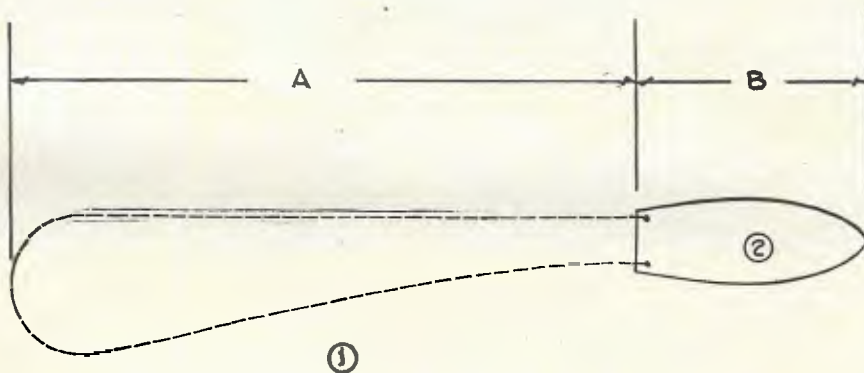
The resistance of small craft to punishment by the elements can be remarkable. Specialized craft such as the 19-foot ocean racing sailboat *Sopranino* have weathered gales safely in mid-ocean. While most small craft do not have the structural strength

or special features of design that would make them eligible to attempt such feats, almost all accepted designs nowadays are basically seaworthy and basically sound. Properly handled, a good small boat can keep out of trouble, if her skipper knows her strengths and weaknesses.

No reputable designer will turn out a boat that can't be nursed safely through a severe squall of the type that strikes without warning. But all the good quali-



Never try to outrace the waves. The seas always move faster than a boat can go and racing them is likely to result in their piling up astern and swamping the boat as it settles.



Running before the seas it is best to slow down as much as possible. Trailing a looped bight of line (1) astern of boat (2) will help. To gauge lengths, A is 60 ft, B 20 ft.



You will make port faster if you slow down. Water is almost solid when hit head on at full throttle. A boat fighting the seas (above) takes too much punishment, may be overpowered. At reduced throttle (below), seas do not stop the boat, which then is never dead in the water and can be controlled.



ties he puts into his design are wasted in the hands of the over-confident skipper who pays no attention to what is happening to his boat from moment to moment, or the over-timid skipper who is in too much of a panic to plot his battle carefully when it is necessary to fight his way to shelter. Another very grave error is that

a good design can be ruined by later alterations to the boat. This is particularly true of any alteration that adds windage or weight to the boat at any height above the water. Flying bridges added to small cruisers that were not designed to carry them are a common hazard. If you are in any doubt about the seaworthiness or struc-

tural soundness of your boat, the only safe procedure is to have her inspected by a responsible authority such as the Coast Guard or a qualified naval architect.

If you find you don't have a safe boat, it is difficult to see how you can justify cruising in her at all. If you do have a safe boat, learn to know her strengths and weaknesses as well as you know your own.

Every boat should be treated in a slightly different way. A light outboard cruiser may be tossed around badly when she sets a course that brings wind and sea in on her beam. Her skipper should try nursing her slowly into the wind, as an obvious way to dampen her motion and eliminate dangerous rolling until the fury of the squall passes. Under the same conditions, a small sailboat may make out best broad-reaching away from the wind, or running off with nothing but a jib. The sailboat's problem is to stand up to her canvas, particularly if she is a small center-board boat with limited inherent stability after a certain point of heel. She will want to sail with eased sheets, at least, so she won't be pinned down and overpowered by a quick gust of wind. The outboard cruiser is unlikely to be overpowered by wind, but must watch the sea, and if necessary find the angle on which it treats her most kindly.

Obviously it is vital that the skipper know the strong point of his craft and work from that, tempering the blast to her weakness. But this will not do him much good if, in a small sailboat, he doesn't know where the critical point comes in carrying sail to windward; and if he doesn't know, in the case of the outboard cruiser, what angle of sea will treat his boxy hull most kindly. These things are easy to learn as you watch your boat's behavior on trial in sheltered water.

Rule 2. Carry Proper Equipment

Basic equipment for a small cruiser consists of all the gear she needs for piloting, maneuvering, anchoring, making signals, and, finally, adequate flotation material for each member of the crew. Each boat should have a separate checklist depending on her needs and how she is used. The Coast Guard currently offers a safety check which it is certainly wise to get at the outset of your cruising. You well may have overlooked some vital item!

With this proviso in mind, following is a list of what you want to start with in any small cruiser that goes more than a mile from shore:

Anchor and line (plus a spare anchor and a spare line)

Charts

Compass (and an extra compass)

Flares

Lifelines for each person

Life ring or cushion

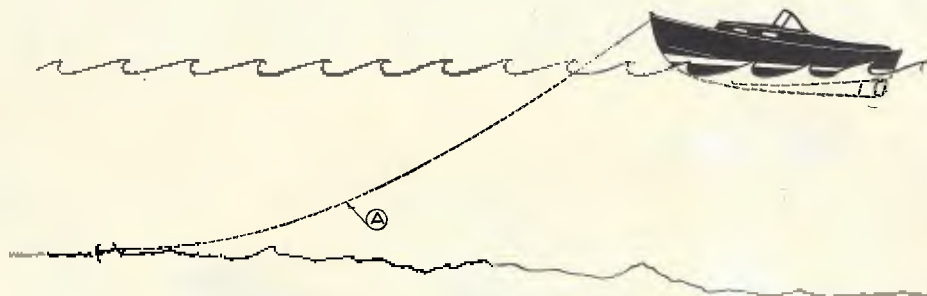
Oars

Tools and spares for engine

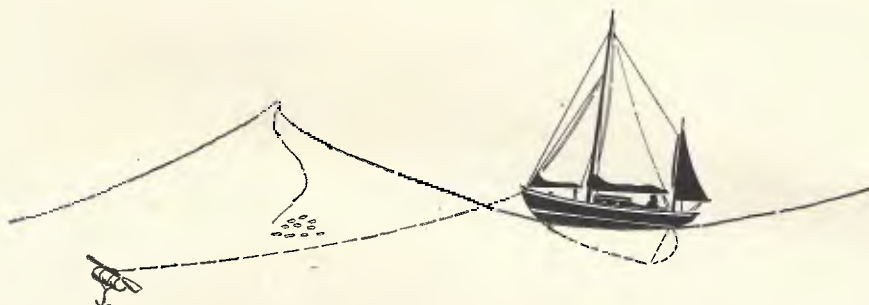
Storm sails

Seaworthy dinghy

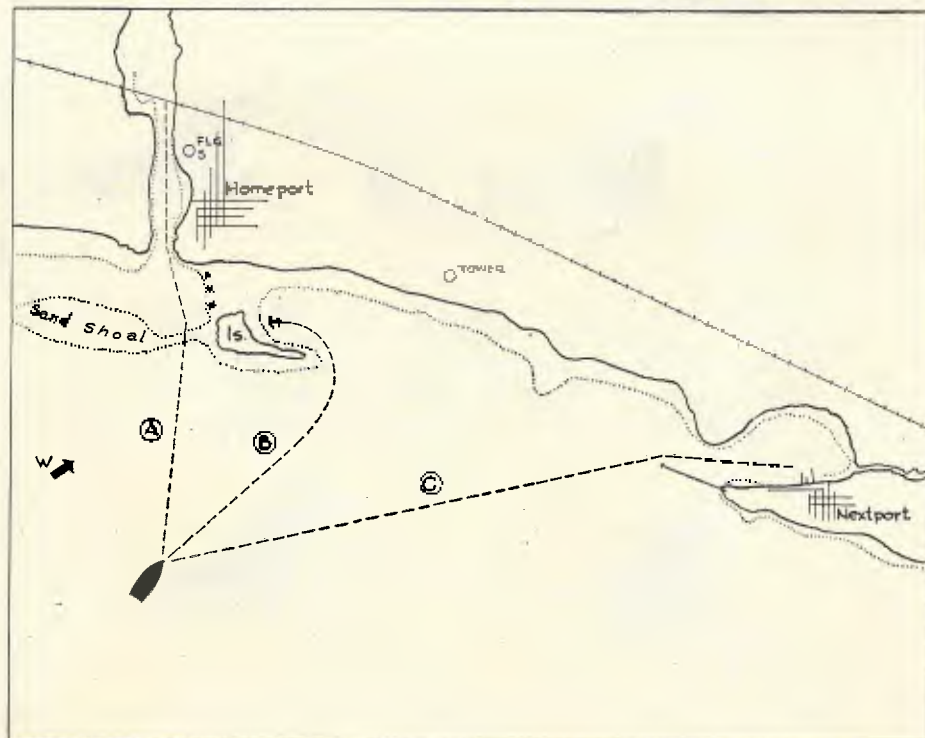
(Continued on page 65)



When close to shore, anchor to avoid being swept to leeward (above). Use plenty of line and add a weight at A to help anchor hold against extra strength of surges. If water is deep, improvise a sea anchor (below) from sail, mattresses, etc., lashed to oar or spare spar. Weight with anchor or ballast. This keeps boat's head to wind, reduces drift.



In bad weather do not attempt dangerous entry to Homeport over breaking bar or shoal. Seek alternatives, such as (B) anchoring behind island or (C) a harbor that can be entered safely. Better to go home by train than risk disaster.



BOATS IN THE CAMERA'S EYE

A Trojan "Bimini" outboard cruiser, a "Whitecapper" by Dunphy, the Wizard fiberglass "El Dorado," and the highly-styled Bee Line "Sapphire" share this month's spotlight



The Bimini is 19 ft long, has a beam of 7 ft 7 in. Built by Trojan Boat Co., Lancaster, Penna., and priced at \$1,995., it is shown here powered by twin 40 hp Scott-Atwater motors.



A recent addition to the line of outboard boats built by Dunphy Boat Corp., of Oshkosh, Wisconsin, is the 16-ft lapstrake runabout, the Whitecapper. Motor is a 35-hp Evinrude Lark.

Wizard Boats, Inc., of Costa Mesa, Calif., has produced this fiberglass cruiser, the El Dorado. One piece molded cabin is sealed to hull in final assembly. Power is twin Johnsons.

The Sapphire, product of Bee Line Mfg. Co., Grand Rapids, Mich., is a 16-ft sport runabout made of laminated fiberglass. Designed for big motors, she is shown with a Mercury Mark 75.



IN SEARCH OF THE SUN DOWN FLORIDA'S GULF COAST

by VIRGINIA F. WHITEHEAD

In the December, 1957, issue of BOATS, Mrs. Whitehead told of cruising in "Sea Queen" from Mobile Bay to Tarpon Springs. Here, the Whiteheads continue their voyage down Florida's Gulf Coast.

AFTER SEVERAL DAYS in peaceful Tarpon Bayou at Tarpon Springs, we decided to head south, intending to cross to the east coast by way of Lake Okechobee and the canal. At Clearwater, our first overnight stop, we had one of those embarrassing encounters with a sand bar that must be expected by those who cruise without local knowledge. Mariners are cautioned against frequently shifting sand bars at harbor entrances. We learned what that means when we ran aground in mid-channel near the end of Sand Key. Fortunately, the party boat *Rainbow* came along (keeping to the deep water on the wrong side of the channel markers) and pulled us off.

At Pass-a-Grille we were weather bound for two days. The channel to the east of town between Long Key and Pine Key was far from desirable as an anchorage. One squall after another bore down on us with cold driving rains, and giant waves swept down the channel from Tampa Bay. Eventually it quieted down and we made our way at snail's pace through the entrance channel. The Gulf, after several days of fresh and strong winds, was a sight to behold. We dropped dizzily from wave crests to troughs, rolling crazily as we dropped. Soon we changed course, heading for Egmont Channel via a short-cut through some shoals. In the lee of Mullet Key we were able to relax for a few minutes, but were soon getting the full sweep of wind and seas from Tampa Bay as we set our course for Anna Maria Key on the south side. A record breaking sail across the bay brought us to shelter behind the sand bar at the entrance to the inside passage to Sarasota.

A few miles south, at Bradenton Beach, we passed through our first bridge since leaving Apalachicola, some three hundred miles and a month behind. The next five or six miles wound past small mangrove islands swarming with birds and brought us to a pleasant little anchorage sheltered from the northeast winds at the top of Sarasota Bay.

At Sarasota's City Pier we sampled marina life. For three months this pleasant town was our "home port." The pier was alive with activity. There were community dinners, dock parties, fish fries, and group sailing parties—plus the pleasures of life ashore. The town itself is friendly and most interesting and, after covering most of the coastline of the state, is still our favorite Florida town.

We listened to all the hurricane bulletins as only boat owners tied up at a pier will do, and breathed sighs of relief as they all made their way northward in the Atlantic. There wasn't a sign of a blow in the area to the south of us, although the records shows this to be in the region of the greatest hurricane frequency.

As the hurricane season ended and November advanced, we managed to find one reason or another for postponing our departure. Although there was much of the coast still to be explored, the hospitality of the town held us fast to our berth.

It was not until December 1st that we got under way again, heading across Sarasota Bay for Big Pass and the Gulf. We had acquired a crew member in Sarasota, Jane Hershey of the *Saki*, who sailed with us to Fort Myers. The *Zephyr*, from Honolulu, had left just ahead of us and, with topsails set, was making fantastic speed down the coast.

On the advice of Bill Kennison of *Zephyr* we headed for the swash channel just off Port Boca Grande to save ourselves several miles of beating into the wind up the main channel. But engine trouble forced us to beat up the channel after all—an arduous chore that took us half the night. Next day, with the engine functioning but unneeded, we sailed through beautiful

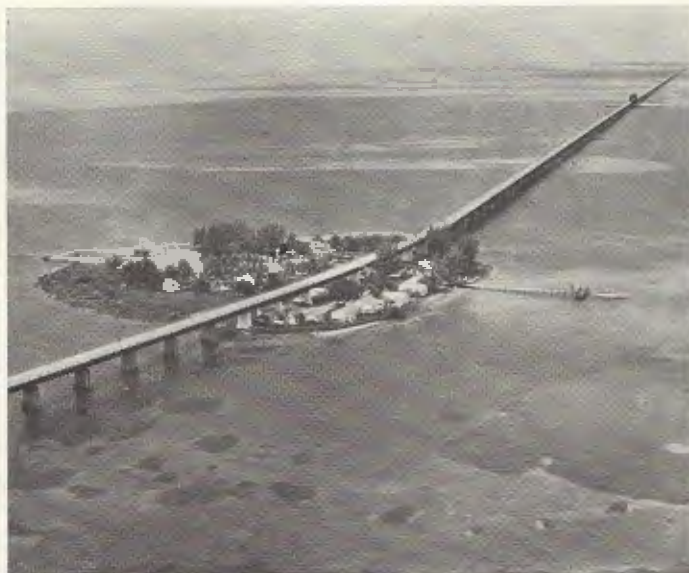
(Continued on page 63)



At Sarasota, "Sea Queen" was tied up for three months while her owners waited out the hurricane season and experienced the amenities of marina life close to city conveniences.



There are still stretches of deserted beach in the less accessible parts of Florida. This one is near Cape Sable.



The Overseas Highway is Key West's link to the mainland. It marked "Sea Queen's" farthest south point in a cruise that began in Mobile Bay and eventually terminated in Miami.

SERVICING THE CARBURETOR

How to disassemble, clean, and adjust
the models that are most widely used

by BOB WHITTIER

CARBURETORS AND MAGNETOS are the two assemblies of outboard motors which most often need servicing. Like magnetos, carburetors are quite easy to understand and once a man has taken a few of them apart and seen for himself what they look like, he can handle almost any carburetor job. Magnetos are made by such firms as Scintilla, Wico, Eisemann, Bendix, and Phelon and so it sometimes happens that a beginning outboard man will have to learn the peculiarities of each as he goes along. The carburetor field, however, is much more easily covered because there is just one independent carburetor manufacturer: Tillotson Manufacturing Co., Toledo, Ohio, whose products are used on a vast majority of outboard motors as well as on a wide range of all kinds of small power plants.

It would be well to say something about general carburetor overhaul and testing procedure. Most carburetors are best worked on when they have been removed from the motors and placed on a clean bench. They will come off easily by removing the few hold-down nuts and disconnecting throttle controls. It is well to have a tin tray on which the small parts can be laid out as they are taken off, as an orderly laying-out helps a great deal in putting them on again in the correct order, and also the tray keeps them from being lost in bench cracks, under tools, and on the floor.

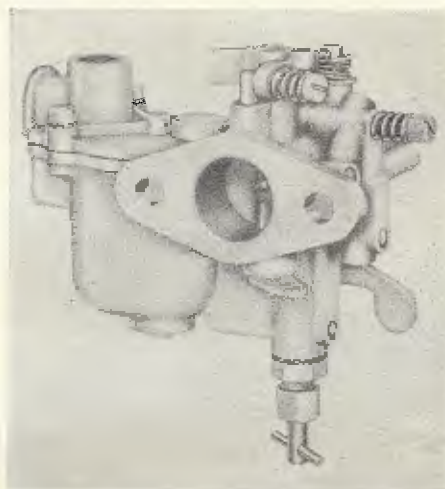
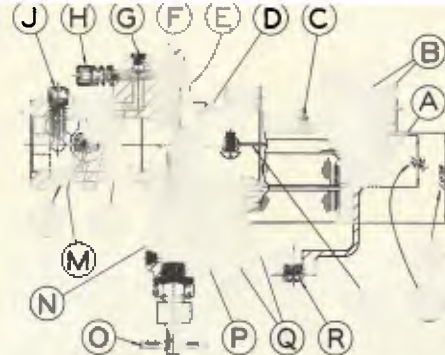
The general disassembly procedure is first to remove the unit. Then the cover over the float chamber can be taken off by removing the three to four screws that hold it on. This gives access to the float, the float valve, and to the small fuel passages leading out of the bowl. Next the needle valve assembly or assemblies can be screwed out of the carburetor body, the protective cover over the venturi opening removed and the jets removed. Taking out the needle valves usually opens up a passageway through which the jets can be removed with a screwdriver. It is usually not necessary to remove the throttle as its condition can be checked while it is in place.

Usually a carburetor will be dismantled because it is suspected that dirt is clogging it, or that the float level is incorrect. Once the above-mentioned units have been removed, one can wash out the interior with gasoline to remove whatever dirt may be there. A jet of compressed air can be directed into the small passage and will almost certainly remove obstructions. If one wants to be really sure a passage is open, blow the air through it from both ends. When no compressed air is available lung pressure will blow out most small lint and rust particles. Only when no other method will work should a piece of wire be run through a jet to clean it, as the wire may damage the jet or alter its size slightly and affect fuel metering characteristics. A toothpick, when available, is excellent for such work.

The float level is checked by taking off the float bowl cover and holding it upside down so that the float which is attached to the cover will be pushing the needle valve into its seat. A measurement is then made from the surface of the cover to the float, followed, if necessary, by bending the float support lever to give the correct measurement as specified by the manufacturer.

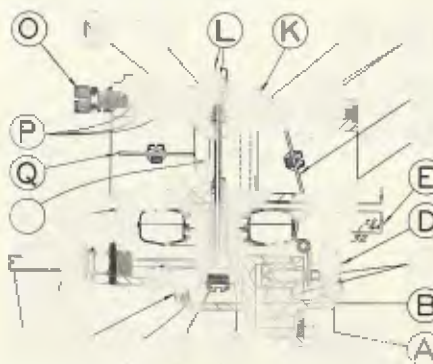
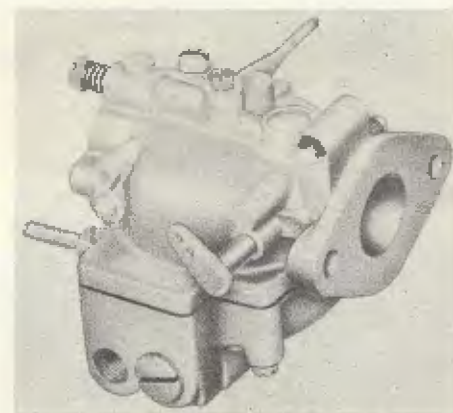
(Continued on page 60)

Tillotson
ML Series



Tillotson ML Series carburetor (above) and Tillotson MD Series (below). The functions of the several parts indicated by letters are given in detail in the accompanying text.

Tillotson
MD Series



A carburetor can be worked on best when it has been removed from the motor. Usually this can be done by taking off the hold-down nuts and disconnecting the throttle controls.

OLEY AND MILT

A photo cartoon of Etiquette Afloat, by Eric Wahleen

Part 5: Docking Ship



The cabin top is an excellent vantage point for viewing the scenery. But when approaching a pier, remember that the skipper may want to see through the windshield.

Normally, docking lines are used to warp the boat in and make it fast to the pier. Passengers are expected to come ashore by themselves.



When coming alongside a pier, don't take chances. If your anxiety to get ashore is overpowering, be sure you know how to swim before making that long step.

When making your way to shore, don't fight your way out. Exit gracefully, with as little damage as possible to the ship's gear and deck fittings.



The "New Horizons" Class

A 25-ft Fiberglass Auxiliary

Designed by Sparkman & Stephens, 79 Madison Avenue, New York, N. Y. Address all inquiries to the designers.

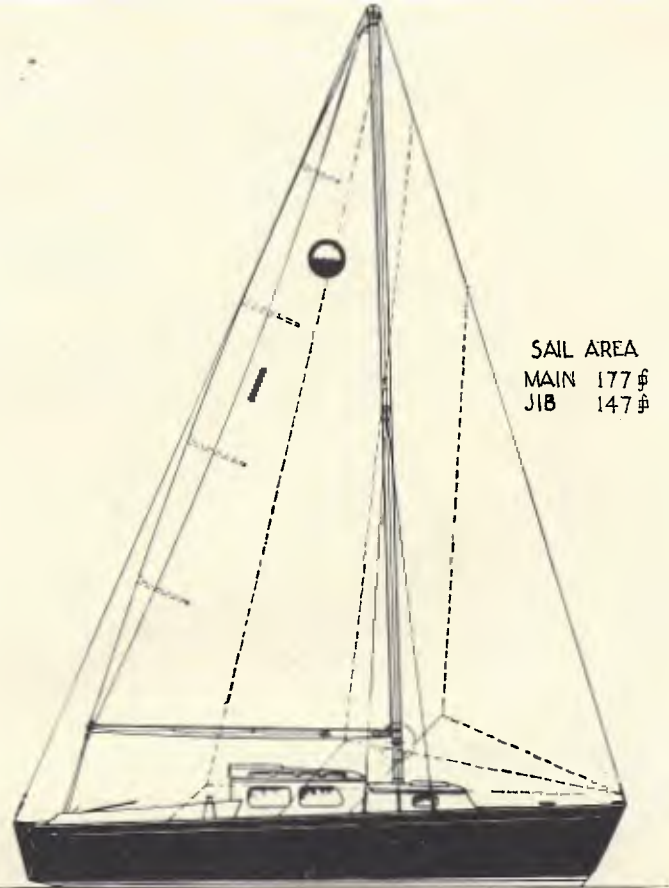
DIMENSIONS: L.O.A. 25 ft 3 in., L.W.L. 21 ft, BEAM 7 ft 9½ in., SAIL AREA 324 sq ft. **POWER** Universal Atomic Four or Outboard Motor.

ONE MAN'S eagerness to solve the problem for those many thousand younger families of modest means who wanted a small cruising auxiliary that would sleep four, has become a reality after more than three years pressing for a solution. The man is Morris Ernst of Nantucket and the boat is the fiberglass sloop now known as the "New Horizons" class. One of America's top designing firms, Sparkman & Stephens, smilingly complain that this little sloop has as much designing time in her as a Cup Defender!

There have been many auxiliaries available for the man of unlimited means. Part of this design problem frankly faced, was cost. Many indeed are the families who've grown tired of class racing and day sailing. Still others who met the water first in power have been eager to try both sail and power in one boat—for greater pleasure and greater safety. But spars and rigging and sails and gear cost money. Auxiliaries have seemed out of reach to many.

Here in 25 ft is a little vessel that has broken through the sound barrier of cost. Made of molded fiberglass, she was initially priced at \$6,495—about half the price of most custom built designs with her livability. Into this small hull, headroom in the main cabin is actually 5 ft 11 in. and 5 ft 8 in. forward. Her draft is light, 3 feet, through the use of a center board. Even this is achieved without cluttering the main cabin, as the board houses under the cabin sole.

The boats are being turned out by Ray Greene of Toledo, Ohio. His yard is one of the pioneers in quantity production of molded fiberglass hulls and has manufactured many sailing boats of various sizes, of which perhaps the best known is the Rebel class sloop. Delivery should not pose a difficult

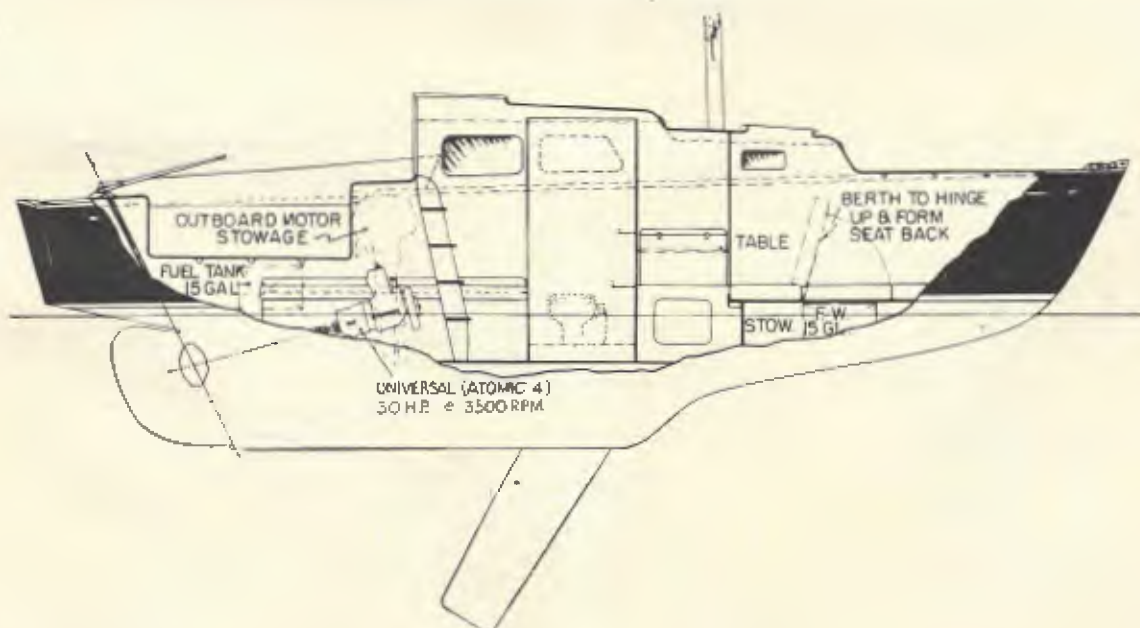


Despite her shallow draft, the New Horizons sloop has 5 ft 11 in. headroom under the doghouse. By stepping the mast on top of the cabin trunk, additional space is gained below.

problem because the hull has been designed to fit readily on a trailer. Owners can arrange to have their boats shipped overland by commercial trucking companies or can take delivery themselves, using their own automobiles and trailers.

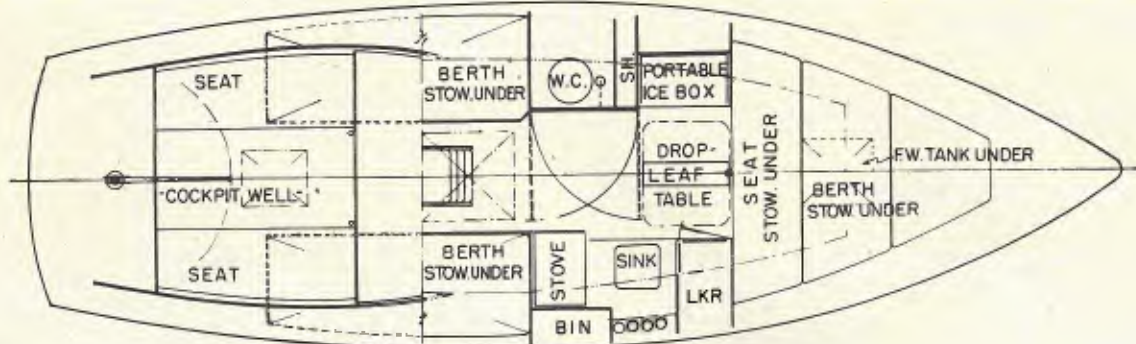
An ample, well-equipped galley, with sink, bin, and locker should be able to handle meals for a hungry foursome that can sit with comfort at her table—below in the cabin or topsides in the roomy cockpit.

The double forward berth folds up ingeniously to provide a



The inboard profile shows how the interior spaces have been compartmented to give privacy without sacrificing free ac-

cess to all parts of the cabin. Note storage space provided for an outboard motor if one is chosen for auxiliary power.



Arrangement plan of the New Horizons class. Complete living accommodations have been worked into the below-decks space.

The forward berth is hinged and can be folded up to form a backrest. Note the drop-leaf table handy to the galley.

comfortable seat, and two quarter berths take care of accommodations for the rest of the crew. She can be powered by outboard or with a Universal Atomic Four. She should make an easy cruising speed under power of five knots under most conditions and perhaps better in smooth water. If the outboard is used, there is a special stowage bracket aft under the companion ladder. A final touch of practical luxury is provided by the enclosed toilet with ingenious sliding doors.

With a working sail area of 324 ft., she should be able and

fast. With *Trina's* amazing performance last summer (see Nov. BOATS) it may be that the more advanced designers are about to present us with an entirely new concept of windward ability and speed in small sailing craft. Watching *Trina* walk away from boats far bigger in both light weather and hard breezes left one feeling that perhaps some new things are being discovered in boats of this size that will be as important and revolutionary as were the Pilot class 33-ft sloops when they made their first appearance in 1946.

Two Outboard Powered Cruisers

Designed by E. G. McCrea & Co, North Hatley, Quebec, Canada. Address all inquiries to the designer.

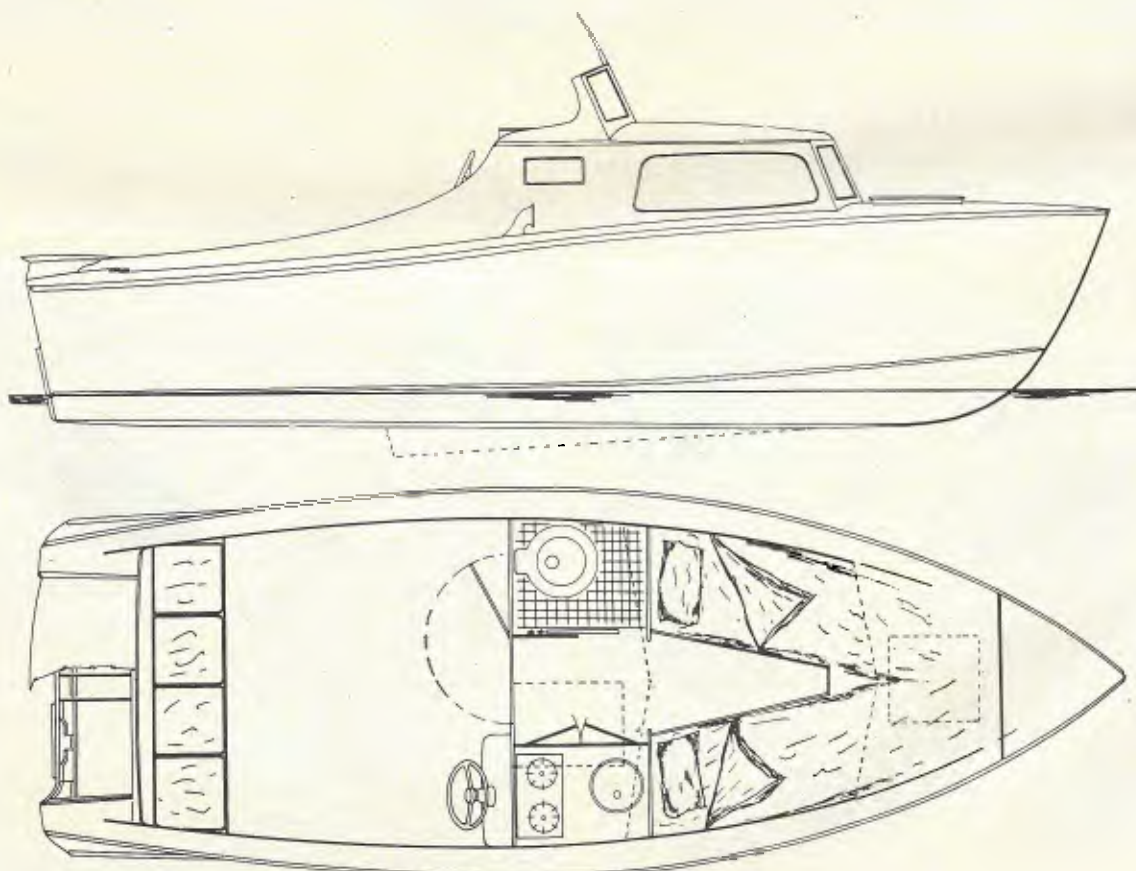
DIMENSIONS: L.O.A. 19 ft 3 in., or 21 ft 2 in., BEAM 6 ft 9 in., or 7 ft 4 in., DRAFT 1 ft 1 in., or 1 ft 3 in.

TWO OUTBOARD POWERED cruisers, one 19 ft 3 in. long, the other 21 ft 2 in. over-all, may be built from the basic design shown here.

Developed for sheet plywood planking, the hulls should be simple for amateur builders to complete. The bottoms are convex vee, monohedron type, with a keel (to provide additional lateral plane for better steering control) that may be omitted if transportation by trailer is an important factor.

Twin outboard motors are recommended by the designer. With power from 15 hp to 50 hp in each motor, speeds to 24 mph are predicted.

The twin berth cabin layout is common to both hulls. Headroom in the smaller is 4 ft 9 in., and 5 ft 4 in. in the larger boat.



Two outboard powered cruisers, 19 ft 3 in. and 21 ft 2 in. long respectively, may be built from this basic design. Pat-

tern kits are available for home construction. Twin outboard motors, up to 50 hp each, are recommended for these boats.



pace-setting profits

with...

Wagemaker
MOLDED PLY-LAP
Catalina's

with

LAPSTRAKE
CLINKER BOAT DESIGN

The revolutionary new method of boat manufacture combines the best of the old and the best of the new. The result is maximum performance and stability plus easy maintenance. Designed for use with today's more powerful motors.

Here they are! The Wagemaker Catalinas that do away with dirt catching ribs and seams that can open and leak. The secret is the exclusive process (Patents Pending) that permanently bonds the molded plywood inner hull with the lapstrake outer hull. 2 styles, 15 models in all. Snappy runabouts and open cockpit off-shore models that feature

mahogany framed windshield and extra-strong, extra-wide transoms for dual motor mounts. Plastic impregnated hulls, finished in choice of black or white. In addition to the Molded Ply-Lap Catalinas Wagemaker offers a complete line of aluminum and molded plywood models.

Dept. 58C

Dealers: You owe it to yourself to check the facts on these exciting new boats.

Send today for complete information.

Wagemaker COMPANY
GRAND RAPIDS, MICHIGAN

A Catamaran 22 ft Long

Designed by Robert B. Harris, 9 Floyd Place, Great Neck, L. I., N. Y. Address all inquiries to the designer.

DIMENSIONS: L.O.A. 22 ft, D.W.L. 17 ft 6 in., BEAM 10 ft, DRAFT (Hull) 8½ in. SAIL AREA 284 sq ft.

IN THIS COUNTRY, and in Europe and South America too, there is evidence of growing interest in boats of the catamaran type. Their shallow draft and high ratio of sail area to displacement make them potentially extremely fast.

Ocelot is the prototype of a class designed for day sailing and racing. She was built in 1956 by Bob Harris and Ned Mullen at Centerport on Long Island. Her designer-owner reports that, in two seasons of use, she has proved to be comfortable and seaworthy, highly maneuverable, and capable of speeds between 15 and 20 knots.

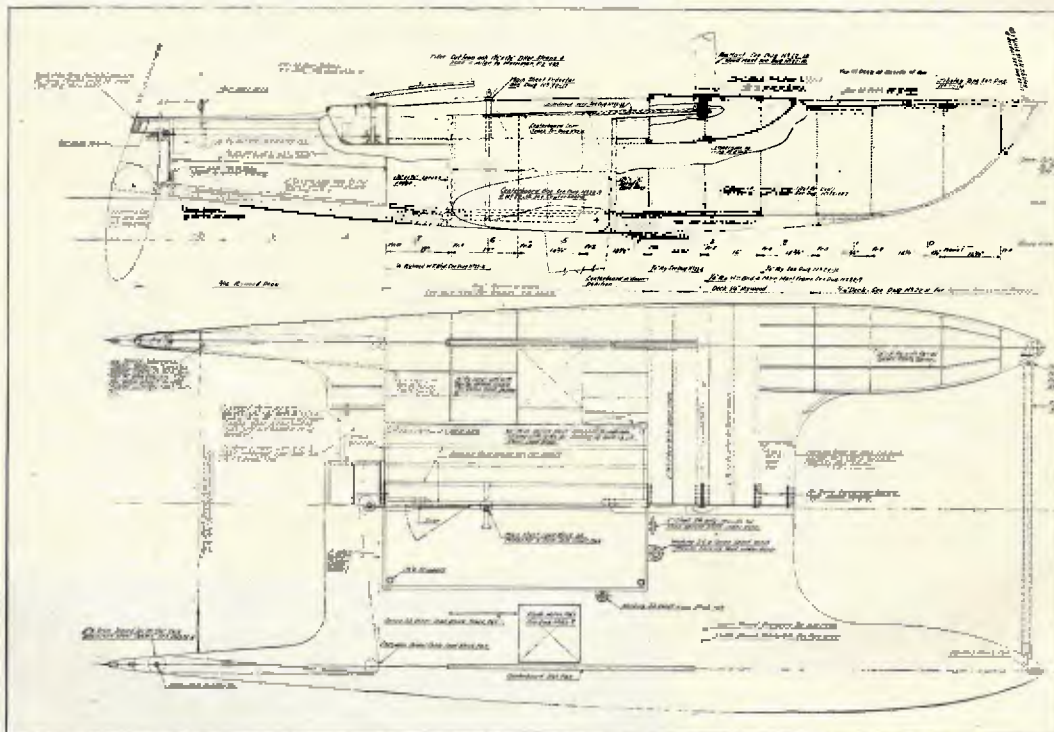
The stems and keels of the twin hulls are mahogany, frames are plywood; the double planking is plywood, but totals only ⅜ of an inch thick. The designer states that class rules permit planking to be single thickness plywood covered with fiberglass, or thin mahogany veneer; but whatever the material used, the displacement of 700 lbs must not be exceeded.

There are twin centerboards for windward work; and twin rudders—controlled by stainless steel cables leading to a tiller amidships. Auxiliary power may be supplied by an outboard motor clamped to a bracket just off the centerline. For trailing, the two hulls can be disconnected at a specially-designed system of bolts in the center section.



The sail plan shows 284 sq ft in main and fore triangle. The mast, which may be aluminum or wood, is stepped on deck.

Inboard profile and plan, showing some construction details.



YOURS...with every comfort afloat



The "42" Flying Bridge Double Cabin is one of 5 husky models for 1958.



IN the Matthews "42" Double Cabin for 1958, cruising reaches the peak of perfection.

The interior layout provides the utmost luxury and spaciousness for six people. The owner's stateroom is a model of restful comfort and privacy.



You'll enjoy the flying bridge, the cozy dining nook, the shower and the roomy deckhouse. The galley is the envy of most women.

Plan ahead now and have a Double Cabin for some grand cruising next summer.

Free catalog is available. Write today.



THE MATTHEWS CO.
PORT CLINTON 8, OHIO

DEALERS COAST-TO-COAST

In Miami: Matthews Cruisers, Inc., 1825 Biscayne Blvd.

"Wherever you cruise » » » you'll find a Matthews"



FREE
TO YOU

A Painting Handbook for Boat Owners

This fact-filled booklet gives you all the fundamentals of boat painting in readable, step-by-step form. Shows you how to save time, save paint, do a better job of fitting-out for more trouble-free fun afloat.

Here's just a sampling of its helpful contents:

- An efficient plan for fitting-out.
- How to prepare topsides, spars, decks, interiors for paint.
- 15 painting rules to get best results with less paint.
- Preparing for winter lay-up.
- Many other ideas to get you overboard fast and shipshape this spring.

Send for your free copy now and be ready to go as soon as the weather settles.



Better Things for Better Living
... through Chemistry

**DULUX®
YACHT
FINISHES**

FOR EVERY SURFACE ABOVE THE WATERLINE

E. I. DU PONT DE NEMOURS & CO. (Inc.)
Finishes Division, Dept. B82
Wilmington 98, Delaware
(West Coast: 612 Howard St., San Francisco, Cal.)

Please send 36-page "Painting Handbook for Boat Owners" to:

Name _____
Address _____
City _____ State _____

On Watch With the AMYA



by R. M. PHELPS, *Executive Director,*
American Yachtsmen's Association

THE MOST POWERFUL voice in policy determination for any activity or enterprise is that of the "user."

A recent small opinion sampling from a group of American Yachtsmen's Association members produced food for serious thought. Over two hundred of the questionnaires sent out were returned with extensive comments, opinions, and suggestions in addition to the simple "yes" or "no" vote. Replies were received from 30 States, Alaska, and the District of Columbia.

There were four topics covered by the questionnaire. The first question concerned the lack of and the need for basic statistics on the broad field of pleasure boating. The question was further broken down to cover the value of: (a) a complete pleasure craft census, (b) the creation of a title guarantee service, (c) complete accident data and (d) the statistical indexing of boats and engines by type and horsepower.

On the question of the need for statistics the vote was, "yes"—175; "no"—20. On part (a), "yes"—162; "no"—16. On part (b), "yes"—124; "no"—31. On part (c) "yes"—162 "no"—18. On part (d), "yes"—103; "no"—61. Regardless of the predominance of the "yes" vote, over 80 percent of the elaborated opinions came from the "no" voters. Typical comments from each side are quoted herewith. From the "yes" group: "There should be complete statistics on pleasure craft exclusively. Such statistics would prove valuable to the boating industry, governmental agencies, and the general public." From the "no" votes: "Of value to manufacturers only. Too costly. Too much chance for misinterpretation and erroneous conclusions."

There was no significant comment, pro or con, on the importance of a complete pleasure craft census.

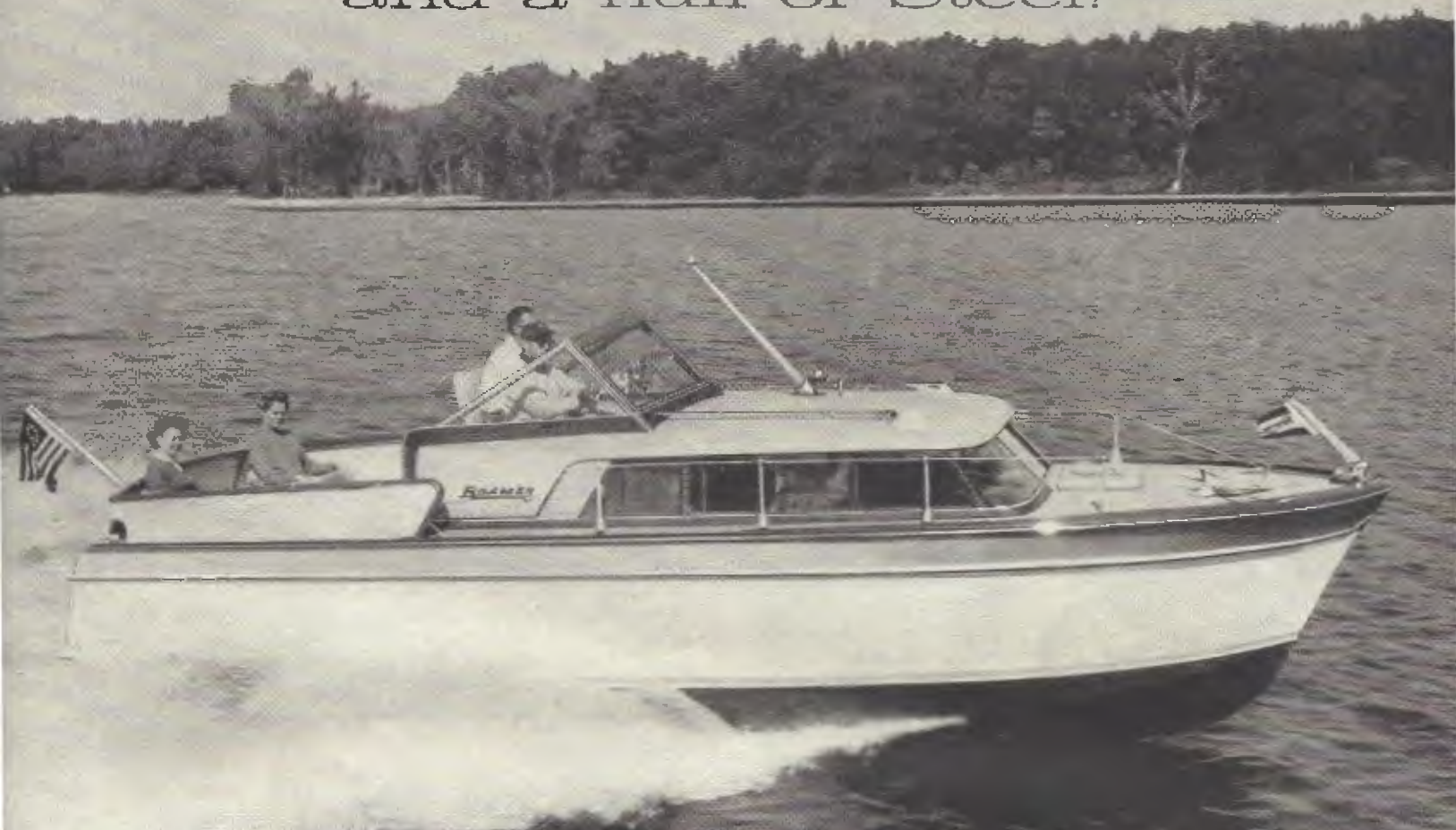
On title guarantee, from those in favor: "Believe this is needed the same as for motor cars." From those opposed: "If adopted, there should be no title for boats costing less than \$1,000." On accident statistics—from the "yes" votes: "Accident data should be the responsibility of the U.S.C.G., given proper funds." From the "no" group: "The main hazards are generally known as well as what a boat operator should do about them—but doesn't!" Finally, on statistics on group types and engine horsepower: "Boat and engine data should be the responsibility of the industry—not the tax payer," and: "The hull and engine is usually a balanced unit worked out by competent naval architects. Why elaborate?"

The second basic question asked on the questionnaire was, "Do you believe the existing regulations covering equipment required aboard the several classifications of motor boats to be adequate?" The vote was: "yes"—113; "no"—75. Typical comment on the pro side: "Present equipment requirements are satisfactory—suggest a compulsory examination of each craft every five years." From the con side: "I do not believe that the present laws covering boat equipment are adequate either as to the requirements or the enforcement."

Question number three was divided into two parts: "Do you believe the present educational programs on safe boat handling as now conducted by volunteer organizations to be sufficient?" and: "Do you believe that Safe Boat Handling as an elective course in public schools would be worth while?" For part one the vote was: "yes"—71; "no"—114. Typical pro comment: "I feel that the courses offered by the USCGA and the USPS are completely adequate—and should be extended in the form of correspondence courses." The opposition said: "These excellent programs do the job for those who attend only. They must not be depended upon to do the job at hand adequately." On the

(Continued on page 44)

and a hull of Steel!



NEW ROAMER 28

[REDACTED]



Write for new full color booklet showing entire Roamer line.

ROAMER STEEL BOATS Holland, Michigan

DIVISION OF CHRIS. CRAFT CORPORATION

[REDACTED]

RADIOTELEPHONE "PACKAGE" FOR YOUR OUTBOARD

A sparkling new 16 watt, 5 channel radiotelephone... complete with 6 precision quartz crystals... with highly effective, center-loaded antenna... with mounting brackets... all *packaged, integrated*, price tagged at \$288.00. *

* (slightly higher in other areas).

AE16

*Unequalled for
the small boat*

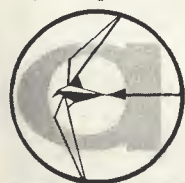
Radiotelephone for routine and emergency... very low battery drain... receiver with 5 pre-tuned channels and tunable standard broadcast... avoids need for second receiver. Compact, light, pretuned.

Install-it-yourself installation requires only final check by dealer. Antenna is smart, streamlined, easily mounted with brackets provided.

*A wonderful
emergency set for
larger boats*

Use AE-16 transmitter as auxiliary standby for permanent larger set. Use receiver at all times for standard broadcast or for 2182 kc monitoring.

At your *Apelco* distributor



apelco

second part of Question 3 the vote was: "yes"—131; "no"—55. Typical affirmative comment was: "All high schools in areas near rivers, oceans and other waterways should run these courses at least twice a year." The negative comment: "The schools today are a hodge podge of manual training, home economics, sex appreciation, playgrounds—everything but the basic 3 Rs. What pearls of nautical wisdom would you expect to emanate from the lips of teacher, Mrs. Dolt (nee Crabapple), daughter of a dry dirt farmer from Roanoke?"

Question 4 asked: "Do you believe that operators of motor boats should be licensed?" The vote was significant: "yes"—140. "no"—55. Typical comment in favor was: "Practically every other form of transportation requires an officially qualified operator. The mammoth growth of pleasure boating needs similar assurances of capability." The "no" vote said: "The Bonner Committee properly by-passed operator licensing. . . . It is to be hoped that State Legislators will not inflict such restrictions on their constituents."

Three important conclusions may be drawn from the opinions expressed by those answering the questionnaire.

First, the superb job that is being done by USPS, USCGA and others in giving instruction in safe boat handling is laudable, but is insufficient to meet present needs.

Second, the question of operator licensing, favored by so many, must be met head on and logically resolved.

Third, the boating industry, the boating press, boating associations, and the American pleasure craft user are still disorganized and impotent to defend their heritage of freedom of the seas from political manipulations and hampering regulation and legislation. For over three years AMYA has urged a "meeting of minds" by all the above agencies. In this hour of real need, the suggestion is, again, strongly proposed. END

Night Operations

From page 19

Sailboats and auxiliaries present a confusing situation. They may be under sail alone, or under power alone, or under power and sail. Under power, even when carrying sail, they are classed as motorboats. But there's always the huge genoa jib that can blanket the side light on the lee side, or the free-sheeted mainsail to do the same thing for another boat approaching from slightly abaft the beam but not farther than two points.

Never rely on the lookout of a large steamship seeing your lights. The lookout's eyes are directed higher and are watching for other large vessels. Skedaddle away from an approaching large ship.

A large mass of light could be a cabin cruiser with cabin and deckhouse lights ablaze and showing so much white light plus colored lights through lamp shades in the deckhouse that you have difficulty distinguishing its white bow and stern lights and even its colored side lights.

It is not always possible to determine whether a boat is approaching head on or on your port or starboard bow unless you can get a range with its bow light and its presumably higher stern light, again presumably on center. Or it may be a Class 1 or A boat with no bow light and you must center the stern light on the combination red and green lights.

Taking a lesson from your car driving, you'll find that it's difficult to gauge the speed of another boat at night in a meeting situation. So play safe and assume the other boat will *not* cross way ahead of your bow or aft of you.

Different types of ships have their lights grouped differently, but only the most experienced night pilot should rely on his knowledge except to know where to find the dope in a hurry on a placard or in a book. It is superfluous knowledge for the boat skipper to learn the meaning of all possible types and combinations of lights, except those commonly encountered. Operating frequently in a large harbor you should certainly recognize towing lights. A favorite question of one marine inspector in Florida examining applicants for licenses to carry passengers for hire is the meaning of a string of amber lights. You'll find

(Continued on page 46)



THE OUT O' GLOUCESTER 30' \$12,900

F.O.B. GLOUCESTER

It's "SOME DAY" right now!

You've dreamed of owning a boat with big, expensive cabin cruiser comfort, speed, style, space and safety—"some day."

Well, you can make your "some day" dream come true right now.

From stem to stern, from hollow keel and moulded skeg to roomy flying bridge, the OUT O' GLOUCESTER 30' was conceived as a boat owner's ideal craft, without regard to cost.

Planned and designed in Gloucester by one of America's leading naval architects, her hull is built in Japan where building costs make possible her amazingly low price. At the same time, the highest quality of construction is assured by the workmanship of thoroughly experienced craftsmen in Japan's best and most famous yards.

OUT O' GLOUCESTER 30' is smartly styled along the most modern lines. Rugged and seaworthy, her unusual features include many that will delight the ladies—from attractive color schemes to separate-cabin and bathroom privacy and complete, efficient kitchen.

Final fitting, painting, rigidly supervised sea tests and installation of the powerful twin PALMER marine engines (135 hp at 3400 rpm) are done at Gloucester.

Introduced at the National Boat Show in New York last month, the OUT O' GLOUCESTER 30' created immediate, widespread interest.

You, too, should know about this first, really new idea in boat design and construction—an idea that, at last, puts expensive, cabin cruiser luxury and performance within reach—makes your "some-day," dream-boat a reality right now!

Send now for full information, complete list of features and specifications and free, illustrated brochure.

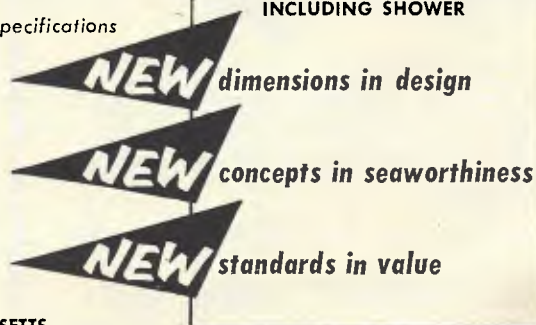
Here are a few of
OUT O' GLOUCESTER
30's big, expensive-boat
features:

- HOLLOW KEEL AND MOULDED SKEG
- ROOMY FLYING BRIDGE
- DUAL STATION CONTROLS
- TWIN 135 HP VEE-DRIVES
- DOUBLE-PLANKED PHILIPPINE MAHOGANY HULL
- FLUSH, WALK-AROUND TEAK DECKS
- 9' x 11' COCKPIT
- SLEEPS FOUR IN CABINS
- COMPLETE GALLEY AND TOILET FACILITIES INCLUDING SHOWER



**Out O'
Gloucester
Enterprises, INC.**

EMERSON AVENUE, GLOUCESTER, MASSACHUSETTS

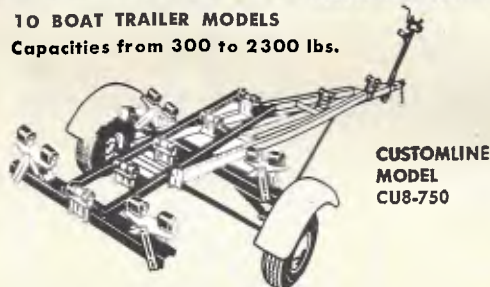


look for the BIG DIFFERENCE in boat trailers

MASTERCRAFT for '58! At first glance, all boat trailers are basically similar in 3 respects. They consist of a pole or frame . . . coupler for connecting to towing vehicle . . . and some type of spring suspension with wheels. But that is where the similarity between the NEW 1958 MASTERCRAFT and other boat trailers ends . . . AND THE BIG DIFFERENCE BEGINS! Superior design and construction . . . amazing performance . . . and more advanced features . . . now in MASTERCRAFT for '58. Want all the facts? Send for 16-page, full-color, illustrated catalog. Free!

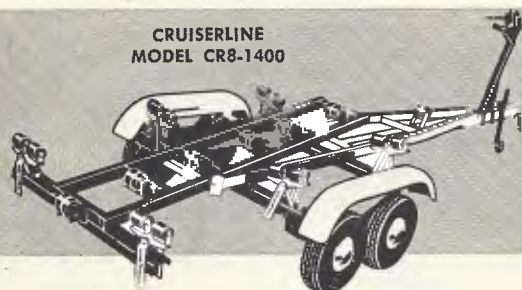


10 BOAT TRAILER MODELS Capacities from 300 to 2300 lbs.



CUSTOMLINE
MODEL
CU8-750

The ideal trailer for the boater who wants the best in complete boat protection and loading and launching ease. Features include the original Torqueless Twin Boom . . . Ultra-Matic load-launch ramp . . . Micro-Matic roller adjustment with full support at cradle, keel and transom. Many more exciting new features in 1958 Customline series by Mastercraft.



CRUISERLINE
MODEL CR8-1400

For heavier outboard cruisers, the all-new 1958 Cruiserline series offer maximum adjustability to hull shape and boat length. Load balance and extra loading and launching ease add new fun to big boat trailering. Many new features including rock and roll tandem wheel assembly for easiest riding ever on any road. Find out for yourself about the BIG DIFFERENCE in big boat trailering this year in Mastercraft CRUISERLINE for '58.

REMEMBER—send for new, 1958 MASTERCRAFT catalog today.

MASTERCRAFT trailers, inc.

47 MIDDLEFIELD STREET, MIDDLETOWN, CONNECTICUT

the dope in Sec. 80.23 on page 50 of Pilot Rules for Inland Waters and you can see why the examining officer considers it important in Florida waters.

Now how about yourself? The good night pilot will develop a "feel" for an impending dangerous situation and some ability in not letting the monotony of a long night trick make him listless. Better to be nervous than dopey.

An adequate lookout should always be posted. Too many plagiarizing manuals and writers have led the novice skipper to believe he must have:

1. a helmsman
2. a lookout
3. a watch officer,

all separate persons. Perhaps that does apply on a large vessel; but on a 22 foot cruiser? Does that rule out the legality of operating single handed? It's the bunk. The skipper-helmsman-lookout, all one person, is legally operating as long as he can function adequately in all capacities. But his lookout function must be performed properly. The glass windshield of the modern cabin cruiser cuts down visibility. Coated with salt from dried spray it's almost opaque. Open it; discomfort is better than running blindly. I like the controls to be on the starboard side. That's my vulnerable side in a meeting situation. And in the deckhouse-controlled cruiser with drapes on the windows you're blind as a bat at night, or even in daylight, if your controls are on the port side. The argument that you come alongside a dock on the port side with a righthand wheel doesn't hold. You don't when wind and/or current favor a starboard landing. And you park your car with your controls away from the curb, don't you?

A lookout on the boat's bow can do his best work if he lies flat. Often a piling or an unlighted boat or large piece of driftwood will loom against the sky or show up against the waves as they reflect light from the sky. An approaching squall ripping the water's surface is also seen better this way.

Unless yours is a fast boat it's wise to keep some watch astern. Remember about skedaddling out of the way of large vessels?

Ordinarily, no lights should be allowed on your boat near the helmsman. If you expect to make a night run, better check your instrument panel and binnacle lights now. Too strong and they're a nuisance. Out of commission and they're worse. Check your running lights. You should have at least one good flashlight handy. The trunk compartment of your car has a light inside. Why doesn't your cruiser's engine compartment?

If a light must be lit near the control position redden it with a red shade; red light does not destroy night vision. But there's nothing like a strong white light shining in your eyes to kill night vision for some minutes. Even moonlight reflecting from white sails will affect it. Feeding yourself carrots or other food rich in Vitamin A does not necessarily assist your night vision unless you have been suffering a Vitamin A deficiency. The Allied Air Forces found that out in the late war. But night pilots were shielded from any but a dim red light for a half hour or more before take-off.

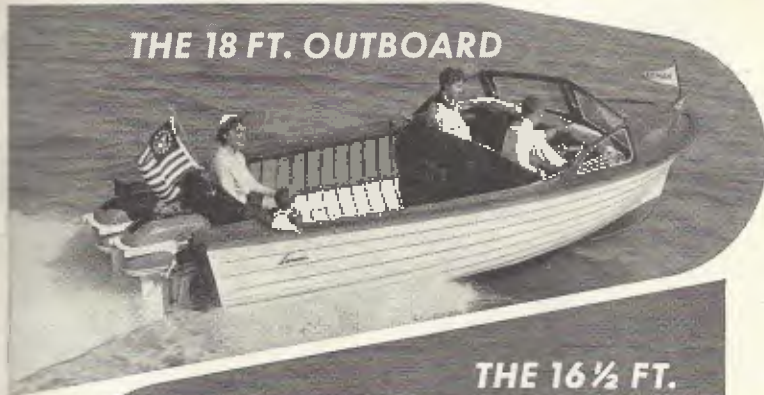
Nervous Nellies use their searchlights with gay and often illegal abandon. Never shine it at another boat except an unlighted one, and then only at the waterline, as you should not disturb the boat's occupants if the boat is out of the channel or fairway. But if the boat is anchored in the channel with no anchor light showing then give it all the light you can. It may wake up the skipper and cause him to realize what a hazard his boat presents.

Use your light if you're running near markers and buoys with reflectors, as they are a great help. Green tape, however, hasn't much visibility; even less than green reflector buttons. If you belong to a club whose moorings are near fairways or other bodies through which boats pass, get the members to fasten tape or buttons on the buoys. Your marina slip, if you use one, will be easier to locate if it has reflectors on the piling.

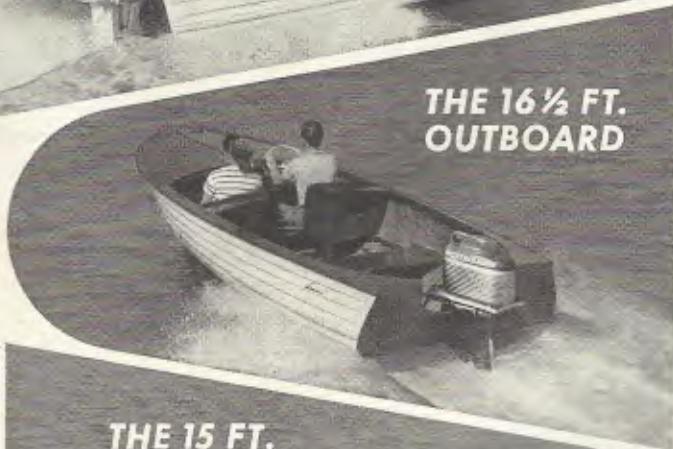
Look into the relative virtues of mounted and hand-held searchlights. For the past five years or so the sealed beam
(Continued on page 48)

The LYMAN '58 Clinker-Built Fleet!

THE 18 FT. OUTBOARD



THE 16½ FT. OUTBOARD



THE 15 FT. OUTBOARD



THE 13 FT. OUTBOARD



THE FISHERMAN



THE LEADER



With new styling and new features, the 1958 Lyman line of Outboards is the finest ever offered. Clinker construction makes a world of difference . . . in greater seaworthiness, in drier, softer riding.

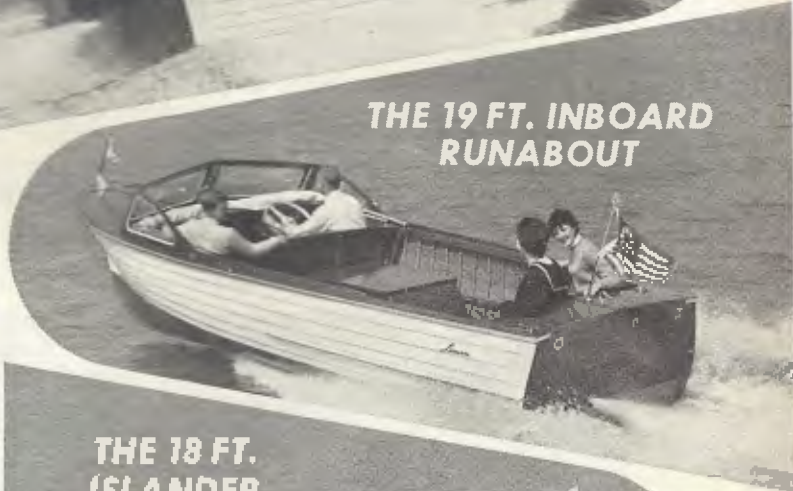
Lyman Outboards are durable, easy to handle, and thrillingly beautiful in every detail.

Before you buy any outboard be sure to see the sensational new 15 Footer, superbly styled, with an entirely new beamier, deeper hull for improved performance — the roomy, versatile 18 Footer — the smart, swift 16½ Footer — and the handy, economical 13 Footer, Fisherman, and Leader models.

THE 23 FT. INBOARD RUNABOUT



THE 19 FT. INBOARD RUNABOUT



THE 18 FT. ISLANDER



Lyman Clinker-built Inboards are outstanding values in beauty, rough water ability, dryness, stability, and soft, level riding.

The all-new 19 Ft. Inboard Runabout is already making a great name for itself as a star performer — outstanding for seaworthiness and comfortable riding.

Biggest member of the Lyman family, the 23 Ft. Inboard Runabout is a husky, stiff, handsome model designed for open waters.

The famous 18 Ft. Islander is roomy and versatile — an ideal family-outing and fishing-party boat.

Lyman designed optional accessories of unusual smartness available for all Lyman Inboards.

Satisfied Lyman owners the country over agree — "You get more for your money in a Lyman." Send for 1958 folder showing all Lyman models

Night Operations

From page 46

searchlight has been popular on boats, and justly so. If you have a hand-held light, rig its wiring so that it can be used either on its own hot-shot battery or on your boat's battery. One or the other may play out, but you'd still have the light to spot navigation aids or signal for help.

A good visual aid is a pair of night glasses. These have low power but carry a large objective lens which "gathers" what little light there is. With a pair of good night glasses you can see objects at night that might be totally invisible through high power ordinary glasses.

Your own eyes should be properly employed in the darkness. Never squint at an object or light or along the horizon in the hope of picking up or identifying it. Look to one side, then slowly move your head toward the direction of the expected object. You'll be more likely to pick it up that way, out of the corner of your eye.

I hope all this dope on night operations doesn't discourage you from trying it. On the next moonlight night, take a spin. It's the best way to practice; to make you proficient in running during those nights when there's no moon at all. Your boat may not make better time on a moonlight run but you will if you have the Girl Friend along.

END

Home Boat Builder

From page 20

needed extra foot of water at the end of my ways would avoid me time and time again. I thinned the depth of the boat's cradle; I lowered the logs of my ways, but still I had to wait for higher tides. Usually success came to me about three hours after midnight in a murky blackness when I should have been in bed asleep. All this I did not like.

I dreaded those spring and fall sessions with the tides and my three ton boat. And the damage my wet-berthed floats suffered during the long winter freeze-ups gave me pause to reflect that boating here in Maine has another side not featured

in the headlines. Boating, with me, became more work than play. I decided I must have a smaller and lighter boat, and I wanted to build her from scratch just as I had done with the first boat. But, as I knew my new boat must be of plywood construction, I did not want to jump right into the job too quickly, for there were things about the building of plywood boats that I needed to know more about. And so, I set my course accordingly.

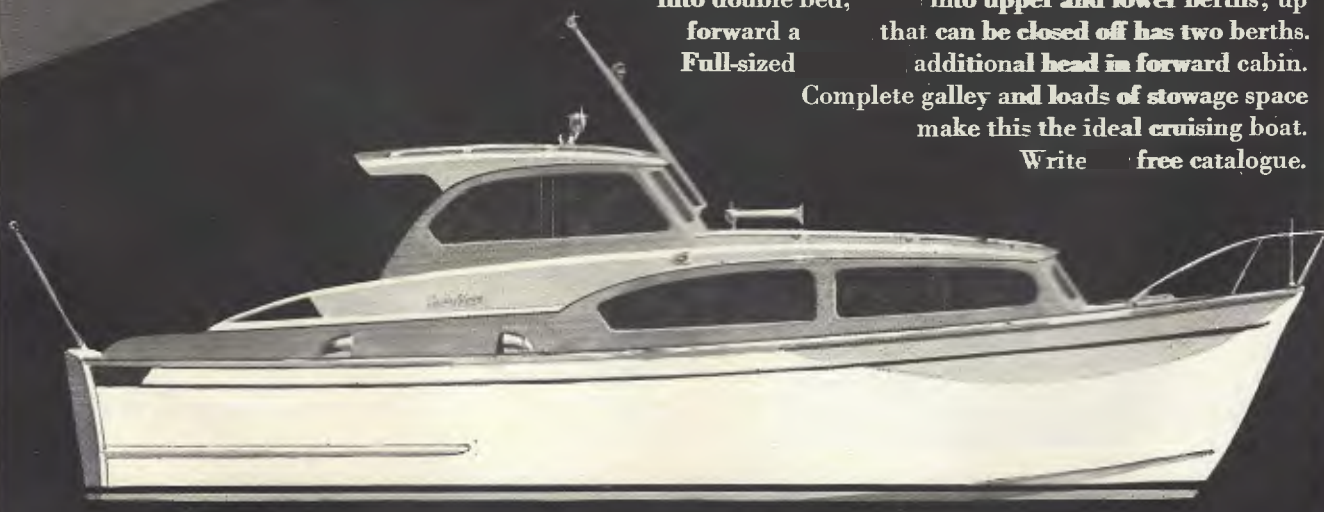
I had, shortly after completing my first seagoing cruiser, built for her one of those little eight foot prams to be used as a dinghy. But I did not use plywood for it. That was a mistake. Just why I built one of these little boats for my own use I do not know. I am full grown, and the years have begun to hang rather heavily upon me, and I should have known better. But I needed a dinghy and these little fellows were the rage of the times. No doubt my eight footer looked sporty trailing along in the wake of my cruiser, but it was never anything but a hazard to me. I used it a few times to take my dog ashore on missions of her own, but that was about all. It would have been quite useless in case of necessity, so after it had tried to dump me overboard a few times I gave it away to someone more spry than I. And then I built myself a twelve foot flat-bottomed plywood rowboat from kit parts and that served the purpose for a dinghy very well. But the day came when I could no longer face the battles I had with the tides spring and fall, and my floats, repaired and rebuilt time and again, became something of which I was ashamed, and so, I sold out completely, dinghy and all, and went home to consider matters.

I was, of course, miserable in my boatless state. It seemed to me the bottom had fallen out of everything. I began to study my boating magazines for plans of the kind of boat I believed I wanted, and I soon had the working drawings for a fine little eighteen foot day cruiser with a beam of seven feet, sturdy looking, and of shallow draft. It had been designed especially for plywood planking. I marked some fine oak trees on my hillside for cutting and sawing into framing stock, ordered the plywood in full lengths and then spent my evenings studying

Something wonderful is happening to boating ...the new Cruis Along Custom 31

Cruis Along
CUSTOM
31

Thrill to the ... of unbeatable boat luxury with real yacht-like accommodations! This mahogany planked cruiser has the Super Hyplane Hull that guarantees a velvet smooth, level, non-pounding ride. It has a large, self-bailing cockpit, teak decks, cruising accommodations for six ... dinette converts into double bed, ... into upper and lower berths; up forward a ... that can be closed off has two berths. Full-sized ... additional head in forward cabin. Complete galley and loads of stowage space make this the ideal cruising boat. Write ... free catalogue.



another season.

The more I studied the plans the more I realized that there was much I needed to know about the construction of plywood planked boats. And it was here I hit upon a scheme that probably saved me much anxiety. It was to build a boat of plywood for use as a tender of my new cruiser, and thereby gain experience with that medium as well as get the tender I knew I should need, for my new cruiser would have to be moored at some distance out in deep water in front of my boat house.

I selected for this experiment a fourteen foot V-bottom boat as manufactured by one of the leading boat manufacturers, for I was to build it from kit parts. I believed that with the instructions that would come with the machined parts I would learn all that I needed to know about boats of this kind, so as to enable me to do a good job on my new cruiser. And it was time and money well spent. I got both the needed experience and the tender in the process.

And so, with the coming of another spring, I set to work on my eighteen footer. The oak for the framing had been seasoning for some time in my barn, but it was a far cry from being sawed to dimension. I had to remanufacture it myself into the sizes I needed in my own little shop, and that added much to the building time of my boat. But, within ten weeks of the time I set up the jig, my new cruiser was afloat, and I was again a happy man. My new boat suits me, and I have hopes that I have built my last one; but only time will answer that question.

And now, for the meat of my story. How does my new boat compare to the gleaming beauties fashioned by simon pure professionals? Well, from a distance she stacks up pretty well, but on closer examination she starts telling the same old story. She would never have made the grade with the boss inspector on the job. Albeit she is a pretty good boat, she is still backyard built. Let me put on my hair shirt and let my back hair down, and then in spite of how it's going to hurt me, I'll show you what I mean.

and not a single screw head shows, thanks to Duratite and my electric sander. But it does not compare with the dazzling finish we see on the boats at the boat shows. And finish, to most people looking at boats, means quality. By that standard, therefore, my boat is from the sticks. So score a point off my boat right at the start, and let's go on to more important things.

And now, I hate to show you this, but I promised to hide nothing. See those closely spaced longitudinal battens up forward under the cabin forepeak? See how unfriendly they are with the plywood planking they are supposed to back up? And notice the shining shanks of the brass screws in between the plywood and the battens. Not many, to be sure, but that is not the way the professionals do it. And I used a fairing stick too, and believed I did it carefully. You see no one mentioned anything about what a few extra intermediate frames would have done in between the four-foot-spaced main frames. They did not show on the plans. Just another thing the boys up front know all about. Oh sure, my boat is strong enough even as things are, for there are many longitudinal battens and most of them make good contact with the plywood. But I did a sloppy job here, and when I found out what the trouble was, it was too late to do anything about it.

And look here where the bottom planking is screwed to the transom framing. See that gap in the seam. And I built it exactly according to the plans. There it showed the transom framing the same size as the transom itself, and screwed solidly to it. But when I set it up on the jig at the specified angle, lo and behold, there was insufficient wood in the transom frame to permit bevelling it to make contact with the plywood planking. And this is a place where staggered screws aid greatly in strengthening this vulnerable seam. Oh well, live and learn. I guess it's strong enough, but I would like to have as many screws in the longway grain of the frame as I have in the edge grain of the plywood. That is the way the boys in the know-how would have done it. If I ever build another boat you bet

(Continued on page 50)

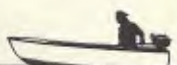


CRUIS ALONG BOATS, INC., Solomons 6, Maryland • Formerly M. M. Davis & Son Inc. • Builders of Fine Boats Since 1875

If you command...



**an
OUTBOARD**



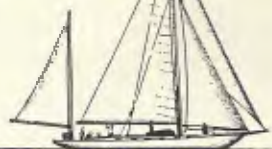
**or a
CRUISER**



**a
DINGHY**



**or a
YAWL**



(or anything else—from a rowboat to a battleship!)

*The World's Finest Anchor
is a*

DANFORTH®



2nd Edition
16 Pages
"Anchors and
Anchoring."
Send Name
and Address for
Free Copy.

DANFORTH *The World's Finest* **ANCHORS**

2127 ALLSTON WAY • BERKELEY 4, CALIF.

I'll make the transom frame a little bigger than the transom itself.

There is one mistake I made in my boat that I cannot show you. The cabin is in the way. But before I built the cabin any one with a good eye could have seen that the port rail corner of the transom was about three quarters of an inch higher than the starboard corner. I lay that all to a phrase in the specifications, "scrap lumber." It said the cross braces for the frames could be made of straight scrap lumber. If I were building another boat like this one, I would use best grade lumber for all these cross braces—and oversized at that. In fact, I believe I would use oak. The constantly mounting loads on the cantilevered ends of these cross braces can so overstress the lumber at these points that any weakness is bound to show up in unequal settlement of the frame, here or there. That is what happened to my job. And, with the boat being built upside down, I had no way to check it. By the time I found it, after the boat had been turned over, the planking was all on and it was in there for keeps. I'm sure glad the cabin cuts off the view from forward along the lines of the rails of my boat. I guess that one is hidden for all time.

And speaking of braces and jibs, brings to my mind some trouble I had with setting up the jig, trouble that may be more common than generally believed. It all came about by my using an inaccurate level, and it was my pet level, too. I even had to disassemble the entire framework and the jig and rebuild it, all because I had not checked my level. Had I reversed it end for end a few times as I used it, to see if the bubble settled in the same place, I would have caught the trouble. Levels are sensitive things and to drop one on the floor may upset its accuracy. The only thing to do is to check it before depending on it.

Lessons to remember

But I did not make the mistake of putting my jig together with nails instead of screws and bolts. I had learned that lesson in building my fourteen footer. There comes a day when the jig must be taken apart just before the boat is to be turned over, and woe to him who used nails to put it together. But in spite of my having built a jig for the fourteen footer, I still built the jig for my cruiser far too low. It was an effort to crawl under it, and I had many occasions for doing so before my job was finished. Better have a good eighteen inches clearance under the jig stringers.

Now that we have looked at the "innards" of my new boat, let's talk generalities for a few moments, for that is where we beginners can go wrong, and stamp our creations all too plainly as having been home built.

Take the matter of cutting the notches in the frames for the chine log. The instructions tell us that these notches should be cut before the frames are erected. Perhaps that is well for the man who can take off the bevels from the layout, but for most of us it is far better to do it after the frames have all been set in place and the chine log clamped in close position so we can see just what kind of a notch to cut. This is especially true when a longitudinally framed boat is being built, for this kind of framing can fool the judgment badly. Frequently, the notch—even for a sizable chine log—will be less than a quarter inch deep in the corner of the frame. I wonder how many good frames have been spoiled by a too generous use of the hand saw here. A good many, no doubt. And what misery must have accompanied every such error.

And while we are on the subject let's take up another point that makes wailing chairs necessary parts of the home-boat-builder's shop. That is the boring of holes for the keel bolts. Usually this is done after the keel has been positioned and just about the time the boat is ready to be turned over. The instructions say to bore from the outside of the boat. This allows for the starting of the hole with an oversized bit to let the bolt head into the keel a little way, and from that angle

LOWEST COST 2-WAY RADIO!



Complete with microphone, AC and DC line cords and short-range plug-in antenna.

REQUIRES NO OPERATOR'S LICENSE,
Special Skill or Knowledge (Station License easily obtained by any U. S. Citizen over 18)

- OPERATES ON CITIZENS RADIO BAND (465 megacycles)
- SIMPLIFIED OPERATION—NO TUNING
- LOUDSPEAKING—EXCELLENT VOICE REPRODUCTION
- COMPACT, LIGHTWEIGHT (4½ lbs.), DURABLE
- NOW SUCCESSFULLY USED BY SPORTSMEN, INDUSTRY, FARMS, AIRCRAFT, COMMERCIAL FISHERMEN, ETC.

Each Vocaline unit a complete sending-receiving set. Plugs into standard household (115V) outlets or into 6V batteries. 12 Volt unit available.

Sold At Leading Marine
And Boat Dealers



Series JRC **VOCALINE** RADIO TRANSCEIVERS

Give You New Boating Convenience, Safety, Pleasure!

Now you can keep in constant touch with other boats; marina or yacht club; home, dock, or car — with the easiest operating, most simplified, lowest-cost 2-Way Radio ever made! Already proved completely successful for all short-range marine uses by thousands of boat owners coast-to-coast. Fully approved by the Federal Communications Commission. See your dealer today for a demonstration or write for free color booklet (see below)

Other models available. Also longer-range, omni-directional antennas and full line of accessories.



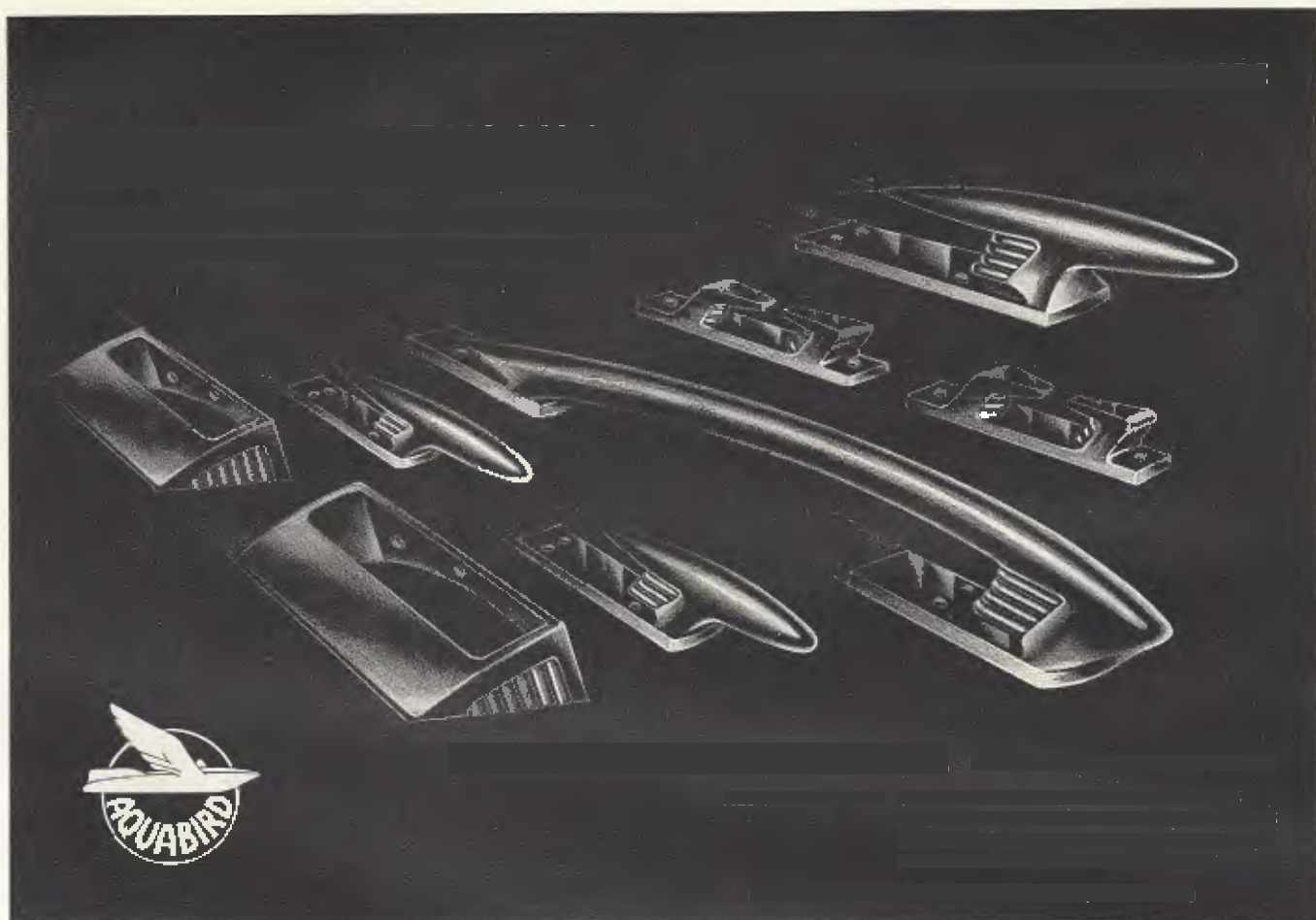
VOCALINE COMPANY OF AMERICA, INC.
OLD SAYBROOK, CONN.

Please send me your full color booklet "New Horizons in Personal Communication."

NAME _____

ADDRESS _____

CITY _____ STATE _____



it is good. But how will things look from the inside when we see the keel bolt hole emerging through the side of the floor timber instead of through the center of its top edge? Could anything stamp our products more plainly as coming from the farm? How much better it is to bore the hole through the floor timber before it is put in place, and then when the time comes for boring the keel bolt holes, crawl in under the boat and bore up through the keel batten and the outer keel. This will mean we must chisel or gouge out a recess for the bolt head in the keel, but the job will be workmanlike in the end, and the builder will be spared a disgrace that will forever be under his very eyes all the days of his boating life.

Probably the best disappearing act of the amateur boat builder's shop is the way a piece of wood can shrink during the fashioning of a breast hook. Many times when the job is done the finished product can be held in the palm of the hand. Why not make a soft wood model of a breasthook before starting in on the final hardwood job? I have saved time and money by doing this. Yes, and I even do it for quarter knees where the angles are tricky. Once the soft wood model is fitted, then by using a carpenter's bevel the "good and honest one" can be quickly made exactly like it. In fact, the making of soft wood models has a real place in amateur boat building. I made the frames for my latest cruiser in pine and erected them on the jig just as if they were to be left in the boat, and then I duplicated them, one at a time in oak, and I saved time and money by doing so. It is so easy to duplicate and so difficult to make it right the first time.

Probably it is the planking of a boat that stirs up apprehension in the minds of most home-boat-builders. Carvel planking has its spiling, and plywood planking has its obstinacy. The bigger the boat the heavier the plywood—and the greater its resistance to bending to shape. I had my troubles with my new cruiser here, but things did not really come to a climax until I started to put on the last full length piece of plywood on the bottom of the boat. It was then I discovered that I had exhausted all clamping holds. There was nothing left to which

I could secure a hold to draw the last heavy sheet into place. And there is a mean twist up forward that can defy the strength of man. I finally had to build a series of cross rafters between the walls of the building in which I was working, setting them just above the keel of the boat. Then, by bracing down from these cross timbers, and by using wedges, together with plenty of boiling water and all the old rags I could find, I managed to press the last big sheet of plywood into place. And is there any grander feeling than to see the last screw set in place on the last plywood planking sheet of a boat? Only one. The day the boat is launched and found to really float at her painted waterline.

Back for the last time to the real issue here. How do our home made boats measure up when compared to those made by the professionals? Depending on our honesty we may have to take off our hats to the pros. But we at home gain in another way, and magnificently. That is in the matter of overall cost. As proof of this statement, I am appending a recapitulation of the actual costs of my boat, a picture of which is shown at the beginning of this article. And these are all 1957 costs, too. Only one caution. The oak framing cost me only for the cutting, the sawing and the hauling, a matter of but forty-five dollars. In the open market, the same schedule in a similar grade lumber would probably have added a hundred dollars to my figures. Here are my figures of cost:

Plywood (mostly in full lengths)	\$200.00
Oak framing stock	45.00
All other lumber (white pine)	40.01
Brass fastenings and gal. iron bolts	44.70
Paint, compounds and canvas	40.42
Deck hardware	20.16
Plexiglass	30.00
Marine toilet and piping etc.	80.00
General, including:	
flash battery operated lights, steering wheel, pulleys,	
tiller rope, anchor and rode, and finish hardware	115.26
Total	\$615.55

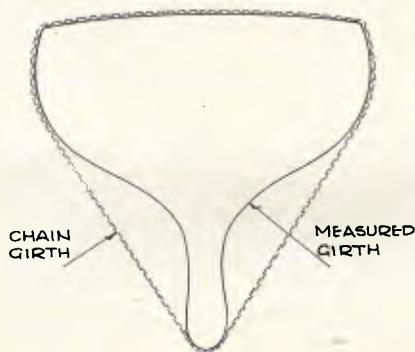
Had I been willing to do without the marine toilet, and had I been willing to use window glass instead of plexiglass with the necessary reshaping of the side windows (which would have hurt the appearance of the boat) I could have saved a hundred dollars of this cost. But even as matters now stand, I got my boat for but a fraction of what it would have cost to buy one of similar size and accommodations in the open market. Her fifteen horsepower motor pushes her at a speed of about ten miles per hour with three aboard, which is as fast as I want to go.

And now, fellow home-boat-builders, I leave to you to judge whether or not, in the final analysis, we come out of the big end of the horn. Our boats may not fool the experts, or sparkle like diamonds on the water, but they can be strongly built, good looking, safe and stable, and last as long as any built. But most of all, they permit us to join in with that ever-increasing happy throng of boatmen to cruise our rivers, lakes, and yes, even out on the briny deep, so long as we use the God given judgment we possess. All this is something many of us would otherwise be unable to do, and that, it seems to me, is ample reason for us to continue our backyard labors, fashioning the ships of our dreams wherever there is room enough to set up a keel, whether it is for a large boat or a small one. Let's keep at it for our own good. END

The America's Cup

of *Ranger's* afterguard is still functioning, so let's suppose Arthur Knapp is the sail trimmer, and now sits to leeward and slightly aft of the mast, watching the trim of the jib and calling instructions back to the men at the winch. These will be part of Rod Stephens' group of four "rovers," who, together with Fred Lawton as Captain and foredeck chief, will go where they are wanted. Right now they're stretched out to windward, reducing windage, as Brenton's Point slips astern to port, and we approach a tremendous spectator fleet, milling around to leeward of the lightship. (In 1958 all yacht owners will take two vacations.)

From page 23



The difference between chain girth and measured girth is the "d" factor referred to earlier in this article.

The word is passed forward to set the large genoa. The middeck gang sorts out—two below to feed it up, and the rest to clip it on the stay, hoist it, and sheet it home. The working jib comes down, is dumped through the after foredeck hatch, and the head of the genoa is shackled on. As it rises, the men below are already stopping and stowing the working jib. A minute and four seconds after the working jib starts down, the genoa breaks out, the "rovers" get their weight out of the bow except for Rod, who stays there to make tactical signals to the cockpit. And a practice run to gauge the start begins. What happens from here on is history.

* * * * *

Now, what does it all mean? In the rig, probably not much to most of us. Although a combination of refinements aloft may give the winning boat the 55 seconds, by which *Rainbow* won the final race in 1934, the cost of bar rigging, single graduated shrouds, trussed booms, and the like, is worth while only in large boats. Sails may well be another story. I'm assured, again by Olin Stephens, that the new synthetic materials will be very largely used, and that "we hope to get our boat out early next summer and do a lot of experimenting." There is still a lot

for Family Water Fun...

Boating's GREAT In a NEW '58

SPEEDLINER

FASTER—SAFER—MORE RUGGED

Sight seeing or water skiing, whatever your reason for buying your family a boat, Speedliner's the boat to buy in '58.

Speedliner for '58 combines new speed, stamina, and styling into the most beautiful and exciting fleet afloat... 26 rakish, precision made Philippine Mahogany Plywood boats that offer you features like a deeper boat at the stern (for safety), more luxurious interiors, stronger, more rigid bottoms, and smoother riding.

And if fiberglass is your fancy, Speedliner has four stunning new models ranging from 14 to 16 feet. But see all the new '58 Super Speedliners at your dealer or send for a copy of the new '58 Speedliner catalog. It's free! Just use the coupon below.



Model M-118 NAMDRAH—newest, trimmest 18' Speedliner, with 72" beam. A 7-passenger liner! Convertible Top optional.



Model M-116 TROPICANA—1958 redesigned 6-passenger, 16' model with many new features. Very smooth riding.



Model M-114 TROPHY, 1958 style—Fast, 6 passenger, easy-riding, quick-turning 14' runabout. Beautiful to handle.



Model M-514, DAMARA, new 1958 5-passenger 14' 10" Speedliner fiberglass hull. Streamline fins optional.

Racing models available for all classes

NEW! SPEEDLINER AQUADYNAMIC WATER SKIS

Enjoy the family fun of water skiing with the strongest, safest water skis made—9-ply Philippine Mahogany Aquadynamic Speedliners. Available in popular sizes and in low-cost kits. Mail coupon below today!

GENERAL MARINE COMPANY

Dept. 328, 6th & Oak St., St. Joseph, Mo.
Please send me complete details on items checked:

- | | |
|---|--|
| <input type="checkbox"/> Speedliner Boats for '58 | <input type="checkbox"/> Water Skis and Kits |
| <input type="checkbox"/> Boat Kits | <input type="checkbox"/> Marine Plywood |
| <input type="checkbox"/> Fiberglass Models | <input type="checkbox"/> Protected Dealerships |

NAME _____
ADDRESS _____
CITY _____ STATE _____

SEE THE



LINE

BEFORE YOU BUY

BH-25

6 H.P. @ 2500 RPM

\$425

IH-60

22 H.P. @ 3000 RPM

\$650

PH-134

60 H.P. @ 3200 RPM

\$815

IH-240

120 H.P. @ 3400 RPM

\$995



THE NEW SPACEMAKER
MODEL

IH-240-SM
120 HP @
3400 RPM

\$1,095



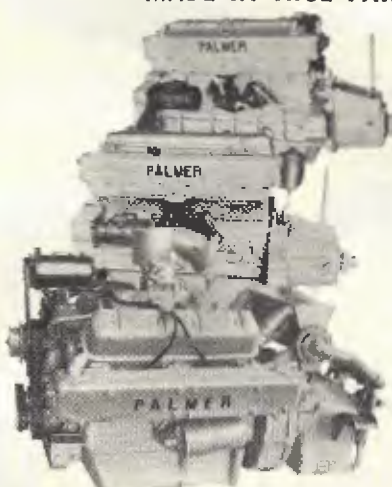
THE NEW SPACEMAKER
MODEL

IH-264-SM
135 HP @
3400 RPM

\$1,175



MADE IN TRUE PAIRS



IH-264

135 H.P. @ 3400 RPM

\$1,075

IH-308

150 H.P. @ 3400 RPM

\$1,325

IH-V461

250 H.P. @ 3600 RPM

\$3,415

List Prices F. O. B. Factory
Palmer Model IH Engines are
made with International Har-
vester engine blocks. Parts are
available everywhere. Send for
folder "The Palmer Line for 1958".



THE PALMER ENGINE CO.

582 Mianus Road

COS COB, CONN.

WITH VALVES IN HEAD—YOU'LL BE WAY AHEAD
—SPECIFY PALMER

to be learned about the actual trimming and stretching of the synthetics, and in boats as closely matched and as often raced as the Twelves will be this summer, the conditions of a controlled experiment in something larger than day sailers are at last available.

The most exciting prospect lies, however, below the water-line, for, although no one is saying much in the present, highly competitive situation, there is a slight air of anticipation in the guarded reports in British Yachting magazines; and a great deal of wild surmise around Boston, where Ray Hunt is at work. Phil Rhodes has been eloquently silent, but his name has often been on the winning lists. And the Stephens boys have done it before. Out of the tank tests and trials of the past came the conceptions that built the *Boleros* and *Carinas* and *Harriers* of our time, and their smaller sisters. The shape of the future's bottom is being worked out right now.

In June, the fun begins.

END

Chapelle

From page 24

is a glorious opposite to those men who by training or temperament refuse to bump heads with someone who has different aims.

For example, all the evidence available concerning Baltimore's antique acquisition, an old frigate named the *Constellation*, shows clearly that this particular vessel was built in Norfolk and not in Baltimore as the Baltimore folk apparently persist in believing. Several people with whom I've discussed this phenomenon have felt that if the people of Baltimore wish to delude themselves, let them play. But not so Chapelle. He protested on historical grounds (he's recognized as a first-rate American naval historian) and incidentally stirred up a controversy which would have been amusing were it not so ineptly handled by the powers concerned.

By now, perhaps the reader may have Chapelle pictured as a sea-going Don Quixote charging at windmills. Not so. However, he does confess to being greatly puzzled at the reactions of the people and their methods of gilding the fraudulent frigate. Possibly these folk are comparable in part to another group about which Chapelle has some cynical feelings: the yachtsmen of today.

"Yachtsmen in general are not practical boatmen. The yacht is a dream, a beautiful toy, to its owner. Imaginary requirements are set up for a trip around the world when you know damned well this man's not likely to get 50 miles from home, and if he ever gets out of sight of land or his harbor, it's remarkable."

His views have never hurt his professional status, apparently. He made "Who's Who" as a historian at age 40, and his designs can be found practically anywhere along the sea coasts of this country.

Non-conformist heritage

Chapelle started off as the son of a non-conformist; his father bucked the tradition of the day by being one of the first, and possibly the first in New England to run a sanitary oyster house. Some of this inclination to do what ought to be done rather than to drift with what's acceptable must have rubbed off on the young "Chap."

At any rate, the father's business exposed the boy to boats at an early age. These boats were workboats. In the years that followed Chapelle trained as a boat designer and, while he's turned out some lovely examples of boats approaching the goldplater tradition, his historical sense plus his practical experiences led him to the work-type boat as the most likely choice to bring more people into boating and to keep them there, alive. The points he makes in explaining his choice are like jabs with a sharp stick in the eyes of his professional contemporaries. I've talked with several who are almost neighbors to him, and they are so diametrically opposed to Chapelle that they will heatedly claim to have never thought much about the man or his work. This reaction is obviously false, although probably not deliberately so. Boat designers borrow ideas freely

There's a NEW LOOK in Outboards!



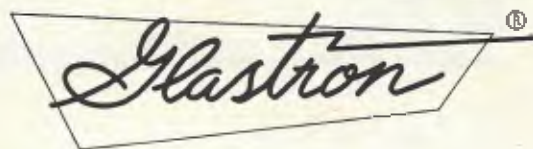
It's the *Glastron* look!

Racy fins, spray-proof bow, a long sleek hull with gleaming MYLAR panels — here's Glastron's look of tomorrow in its 1958 fiberglass SEAlite!* A performance winner too, the 17-foot SEAlite recently completed a 2600 mile, non-stop Texas to New York City test trip. At right is the 15-foot FIRElite,* another reason for 1958 being the greatest Glastron year ever!



SKIfite*—Versatile 14 and one-half foot speedster. Designed for those who want an all-around sports model.

*PAT. PENDING



STANDARD GLASS PRODUCTS, INC.
P. O. BOX 9211, AUSTIN, TEXAS

and watch each other's work like hawks. Boat design still is very much a pragmatic craft rather than an exact science.

A real eye-jabbing type of statement by Chapelle is the one previously mentioned, that "most designers can't design a good cheap boat because they don't know construction well enough." The other fellows' retorts are almost invariably, "Who wants to have a cheap boat?" Chapelle says there are a few people around who get along with cheap boats and that there are going to be many more in the not-too-far-off. Other reasons ignored for the moment, he thinks the trend of the times will see to it. He goes further and prophesies the fading away of the deep-keel yacht in these United States:

"Tax increases and changing social conditions, none of which I like but which I must face up to, are gradually eliminating the wealthy man, the man who can afford high prices for the boats sold today as yachts. However, an increasing number of people with moderate means are coming along. The goldplater is not for them. I think boats should be functionally useful and designed as such. The dream purpose comes afterward."

The "workboat" in this discussion is a family of boats either flat or slightly Vee'd in bottom form. It is a "sharpie," "skip-jack," or "bugeye." In most cases the planking of the bottom is cross-wise or diagonal, rather than fore and aft. The decks frequently are flat, not crowned. There is less standing rigging or none at all, and certainly none of the high-priced stainless steel variety. Building material is more of honest yellow pine and less of the pseudo or very expensive finer grained woods.

In profile, these workboats have graceful sheers and shallow topsides. They do not have elaborate wineglass sections or compound curves.

They generally have no deep keels as such; stability is provided by either ample beam or low sail plans. Centerboards are the order of the day except when an unusually intelligent and brave customer comes along to accept the long-proven fact that leeboards provide the most efficient kind of lateral area to a sailboat's underwater form.

This type of boat would seem a natural for the man with limited means. Chapelle feels that many do not buy because they have too much false pride, are too interested in keeping up with the goldplated Joneses. Or, if they do buy a boat, they all too often plank out their cash or credit on a miniature chromeplater, the highly stylized outboard runabout. Of these boats, Chapelle has strong words to say (he specifically excludes certain runabouts that are well-designed and well-built by experienced boatbuilding concerns).

"Several years ago, the boatbuilding trade appointed committees that were supposed to come up with design, building, and testing practices for safe boats. This has not been done . . . I suspect that many of these 'runabouts' will sink if filled with water . . . selling junk which is nothing more than sucker bait . . . my experience with those tests (Chapelle helped test a large number of runabouts for seaworthiness and strength) convinced me that fully half the boatbuilding trade of today should be the hell out of it or we are all going to be in trouble."

For those who are "convinced" at this point, there are interesting things to be noted with respect to the workboat. Sometime back, Chapelle published plans for a minimum budget boat, 24 ft long. The boat was flat-bottomed, two-masted. One reader reported building this boat for slightly more than \$700, and he was fancier about it than the plans called for. The same thing in keel, or fashionable, or goldplate boats (take your pick, they're the same) would have cost about three times as much in materials, and would have required at least twice the time to build. If you could build the goldplater.

Chapelle has his doubts about the general run of amateur boatbuilding ability: "There have been exceptions where the amateur is better than most professionals, but the usual order of skill in the home is low."

Chapelle is the author of a number of authoritative books and of countless magazine articles. His "Yacht Designing and Planning," for yachtsmen, students, and amateurs, and "Boat-

THE



"BIG 16" HYDROPLANE

NOW IS ALL FIBERGLASS



LENGTH 16'—BEAM 72"—DEPTH 32"



Write today for photos and performance data

DEALERS—Exclusive franchises open for a line that can't be beat or copied. Patents pending.

SEA SLED INDUSTRIES, INC.
3800 Dempster Street, Skokie, Illinois

Do you think you are riding in the
FASTEST, SAFEST, SMOOTHEST
boat on the water?

YOU ARE if you are riding
in the newly designed
FIBERGLASS SEA SLED HYDROPLANE.

**Speed with safety, comfort and
absolute level riding in any sea.**

*No Connection With Hickman Sea Sled Co.

building," are generally considered to be basic, standard textbooks on the subject. Clearly written, they describe all phases of practical boatbuilding, from the original concept through lofting and fabrication to the final finishing, in straightforward, easy-to-understand style.

Chapelle is, also, a foremost maritime historian. He has written "The History of American Sailing Ships," "The Baltimore Clipper," and "American Sailing Craft."

His affection for the plain, practical workboats that were evolved in various parts of the country has led him to search out old sailing vessels and to take off their lines before all records of them should have been lost. One such type is the Pinkie, about which he has written several magazine articles. He even had one of these little vessels built, and sailed her in Atlantic coastal waters for a number of seasons.

Favorite complaints by those who refer to the workboats as "tubs" and to Chapelle in unprintables are that the workboats, in the case of sail, "won't sail," "are dangerous." Chapelle refutes these charges chapter and verse; his examples are the most interesting boat histories I've heard and also are too many to repeat at this time. In general, however, he says:

"Workboats are heavier built than the usual yacht. They are therefore stronger and longer lasting, especially in proportion to the original cost.

"Workboats are safer than goldplaters. They were and are built to sail in all kinds of weather."

He pointed out that the workboat does have less headroom. And, if it is to be true to type, it will have much less trim than the expensive form.

As to sailing qualities, "Since the workboats are heavier, they naturally take more sail or power to drive them; the power-weight factor is a basic speed control regardless of type. However, you can easily put more power or sail on because the workboat is heavier and beamier to begin with."

These sails must be as well cut as the sails on a goldplater, if the workboat is to function at her best, which Chapelle

feels will equal or exceed the goldplater. The H-28, a good representative of the round-bottom deep keel cruising gold-plater for her length, is a lightly built boat. Chapelle declares, "You could take a 28-ft skipjack modeled after those built in the Chesapeake Bay at the turn of the century, bend a good suit of sails to her, and she'd sail as fast, be roomier, would point up and fetch as well or better than the H-28. She'd be a lot cheaper to build and maintain."

At this point, you, the reader, will have made up your mind one way or another. This man Chapelle can be accepted or not. I would be stretching a point if I said he doesn't care what you think—he likes people too much for that kind of statement to be true—but he does avoid the polite small talk so monotonously characteristic of relations between most people. If there's an interchange of ideas, then he's for it, in a logical and likeable manner.

"Chap" has just returned from Turkey, where he spent a year with the special mission from the Food and Agriculture Organization of the United Nations. His project was to aid the fishermen of that country by designing boats that would be more efficient and simple to build. At present, he is Curator of Watercraft in Transportation at the U. S. National Museum, Smithsonian Institution, in Washington.

END

Safety Conference

From page 26

could be valuable adjuncts in the educational effort of the scope now so urgently needed.

The following are details of other resolutions that were adopted by the conference.

Equipment Regulations

Equipment regulations of the Motorboat Act of 1940 were regarded as minimum, and, on the whole, inadequate as a basis for a satisfactory set of safety standards. The sections

of the Act concerning equipment should be repealed and legislation should be enacted to give the Coast Guard power to establish equipment regulations to be promulgated after a public hearing.

Construction Standards

The Panel was in agreement with the conclusions of the Bonner Committee that no federal legislation is needed with respect to construction standards. The Panel lent support to the statement that there is a pressing need for accelerated development of standards. It was of the opinion, too, that existing programs for development of standards have made noteworthy progress in this direction and that their scope is adequate for the currently recognized problems in this field.

Accident Statistics

The Panel concluded that, for the purpose of statistical compilation, a reportable accident may be defined as one "happening to, or involving, recreational watercraft, operated on or from any waters of or within the United States of America, its territories or possessions, that results in the death, permanent impairment, or disabling injury of any person for one day or longer, or in property damage in excess of \$100."

Pending the establishment of a permanent statistical system, the U. S. Coast Guard should serve as the clearing house for available statistical reports and should solicit such reports.

The Panel recommended that, as soon as practicable, a single Federal Agency be designated to compile and disseminate national boating accident statistics, based on official state and/or U. S. Coast Guard records compiled as a result of laws or regulations requiring the reporting of accidents.

Another recommendation was that any Federal legislation authorizing the States to number small boats should also request the States to cooperate in compiling statistics and forwarding them to a Federal agency designated to gather and disseminate that information.

Educational Program

The Panel on Education pointed out that the American National Red Cross, Boy Scouts of America, U. S. Coast Guard Auxiliary, U. S. Power Squadrons, and many other organizations already have courses and other educational materials for improving boating safety. Several basic steps were suggested to promote programs directed to the general public in all age groups.

1. It was recommended that the U. S. Power Squadrons, American Red Cross, National Safety Council, Coast Guard Auxiliary and other interested groups combine their efforts to provide a basic standardized course on boating safety, and that they should make the course available through all organizations desiring to assume responsibility in teaching small boat safety.

2. State and local governments, and school and college authorities, should be urged to adopt this standardized course in public and private schools and colleges with appropriate credits, and to conduct training sessions as a part of their curricula. When a student should have completed an adequate course through some recognized safety organization, and had received a certificate indicating that the course had been satisfactorily completed, then credits would be given on the same basis as for other approved courses.

3. Manufacturers and dealers, through their associations, and other interested persons, should provide assistance in compiling and distributing safety promotional material—including radio releases, television spots, posters, newspaper mats, and appropriate newspaper releases and so on, describing media to be used by any group or person who might request the material for promoting safety in boating. Organizations and individuals wishing to promote pleasure boating safety should be urged to utilize available information and furnish it to local press, radio, and TV stations.

It was suggested that the National Safety Council be urged to include a small boat safety session or a series of sessions.



A FEW OF THE MANY NEW ITEMS IN THE GREAT 1958 APCO LINE

NEW "STORM SIGNAL" CUSHION



Covered with 12 gauge unsupported vinyl with no fabric backing. Made boxed edge style with perforated boxing and white plastic cording. Filled with kapok contained in 4 electronically sealed vinyl bags. Size 15" x 15" x 2". Color: Yellow cushion with colorful designs in red, black and white. The designs illustrate the new U.S. Weather Bureau Storm Signals effective January 1st.

A necessity on every boat.

UNICELLULAR PLASTIC SKI VEST



Covered with fast colored Red fabric. Filled with the New Unicellular Plastic buoyant material which will not waterlog or mildew. Equipped with adjustable web strap around belt with dee ring closure. Made in 2 sizes Adult, Small, and Adult Large.

UNICELLULAR PLASTIC SKI BELT



COVERED WITH FAST colored orange fabric filled with the New Unicellular Plastic buoyant material which will not waterlog or mildew. Equipped with adjustable web strap around belt with dee ring closure. Made in 3 sizes: 20"-24" Waist, 26"-30" Waist, 32"-40" Waist.

APCO WATER SKIS

APCO SKIS are made for use by amateurs and professionals. APCO quality SKIS are reinforced and laminated to permanently keep their shape. APCO adjustable foot grips are made of pure molded gum rubber and aluminum fittings and placed to give perfect balance for buoyant Planing. Finished in Red with Yellow trim. Also finished in natural varnish with Red trim.



ATLANTIC-PACIFIC MFG. CORP.

124 ATLANTIC AVE. BROOKLYN 1, N. Y.

Everything to
make your boat
LOOK better
RUN better
HANDLE better

NEW! 1958 HANDBOOK OF BOAT EQUIPMENT only 25¢

With this all-new 1958 catalog of Wilcox-Crittenden equipment, you can start now to build, dress up, or outfit your boat for Spring. There's every new gadget and fitting you need for outboards, motorboats, and kit boats — new steerers, speedometers, lights, drip pans, throttle controls . . . plus hundreds of other dependable W-C items. Ask your dealer for a copy. Or write us, enclosing 25¢ for handling costs.



Only 25¢.

NEW 1958 SAILBOAT CATALOG

Everything for building or rigging a sailboat — complete rigging lists and details.

WILCOX-CRITTENDEN

Division, North & Judd Mfg. Co.

2 SOUTH MAIN STREET, MIDDLETOWN, CONN.

Holds Over 6 Times As Much Copper Oxide
As The Average Bottom Paint!

for use in salt water

The toxic particles are packed so close together that they guarantee uniform protection . . . maximum protection from borers, shipworms and barnacles. Consistent in performance. Easy to mix after prolonged storage



The fiberglass bottom of a cabin cruiser in Biscayne Bay five months after painting. Note the clean area on the right, which had been coated with No. 9134 Copperpac and that on the left which had been painted with another leading brand of bottom paint.

See your Dolphin dealer or write for free literature and dealers' names.

*Trademarks Reg. U.S. Pat. Off.

501 LOCUST STREET, TOLEDO 2, OHIO

as a part of future National Safety Congresses and Regional Congresses.

The Panel noted that large groups of people interested in pleasure boating gather at conferences, boat shows, and other similar occasions throughout the year. It urged that the Coast Guard, acting in conjunction with special committees of the organizations sponsoring the gatherings, conduct pleasure boating safety sessions at these meetings and at regional meetings of boating dealers and manufacturers held in New York, Chicago, Miami, Seattle, and San Francisco at the time when boat shows are scheduled in those areas.

The Panel urged the Coast Guard, acting in conjunction with the Department of the Interior, to conduct pleasure boating safety sessions at the National Wild Life Conferences.

Bibliography of Safety Material

The panel noted that many organizations are issuing interesting and effective material respecting various aspects of pleasure boating, but that this information is not generally available because there is no clearing house for its distribution. It was recommended that all the organizations represented in the Conference furnish up-to-date bibliographies of their material to the Coast Guard for inclusion in the Report of the Conference.

Enforcement

The Panel felt that small boat safety could be improved through effective enforcement programs by Federal and State enforcement officials.

It was recommended that:

1. The Mobile Boarding Teams of the Coast Guard be expanded to cover more thoroughly the waters over which the Federal government has jurisdiction.
2. The State and local municipal governments be urged to provide effective enforcement of State or local requirements and safe boating practice in waters over which they have jurisdiction.

The Panel noted that a cause of many fatalities in pleasure boating accidents is the inability of persons to swim or keep themselves afloat in the water. It was recommended that:

1. All persons desiring to engage in pleasure boating should be urged to have a knowledge of swimming, or an ability to handle themselves when in the water.
2. Those persons who do not know how to swim should be urged to wear or have available appropriate life-saving devices when on board pleasure boats.

At its conclusion, the conference went firmly on record that some form of annual conferences, or continuing committees, be thought of as a necessity in dealing with a problem of the size and scope of safety on the water. END

Rugged Cruise

From page 28

detic Survey charts, the three Texans dashed down the Houston ship channel to the Gulf, up the coast and into the intracoastal waterway. They were cruising optimistically, ahead of schedule, when they suffered the first of a myriad of setbacks near Cameron, Louisiana.

Hurricane Audrey had played havoc with marker lights along the channel. It was a dark night and on one stretch, where no lights burned, the boat made a wrong turn and ended up in a stump-infested swamp. The prop struck a submerged tree stump and sheared a blade. They might have been stranded in the swamp all night had it not been for a tug that made the same mistake. The tug pilot knew the waters well, and he led the Texans' boat safely back to the channel.

It was on Mississippi Sound that they got their first weather scare. As the boat skittered across the Sound, Barnhouse noticed a giant dark cloud ominously following them. They pushed ahead at top speed hoping to outrun it. But the swift and silent cloud crept closer, and in the mouth of Mobile Bay it pounced on them like a lynx. It was a honey of a storm—raging winds, pelting rains, and hazy lead-colored overcast skies. Luckily the Texans were near Dauphin Island and they pulled into the

FLYING BRIDGE FEATURED IN NEW BORUM OUTBOARD CRUISER

OTIS C. BORUM presents for 1958 his great new flying-bridge 17' cruisers, the Voyager and Cruisabout. Although big and roomy to accommodate extra gear for extended family cruising, 35 HP will be found quite ample for average load conditions. For greater loads and speeds she is designed to handle up to 80 HP with

perfect ease. Sleeps either 2 or 4 in separate compartments. Comes equipped with optional marine toilet and extras such as convertible top, padded swivel deck chairs for the aft cockpit, side and rear curtains and screens, chrome plated hardware, running and navigational lights.



safety of the protective dock. Here they lost three and one-half hours.

The Gulf run between Apalachicola and Pensacola proved to be the trip's real challenge. They were in Apalachicola late in an afternoon. As they pulled out of the harbor, a vermillion sun splayed crimson streamers through the broken clouds and reflected brightly on the turbulent water. As far as they could see, nothing but forlorn jade-green Gulf water. Dark was fast approaching and the first jaunt across open water grimly faced them. Navigating at night in open water was something relatively new to all three.

Through the night the boat probed ahead, its twin engines throbbing in their bass voices and the spotlights atop the canopy funneling into the darkness. They felt as though they were in a vast, strange world inky black, and limited by the beams of their lights.

"I wasn't too scared at first," Cloud admitted soberly. "But when we didn't sight land after seven hours, I felt I wasn't too sure of anything anymore."

In the dead of the night, another squall raced across the water, striking unexpectedly. It lashed at the boat bobbing on the surface like a fisherman's cork. Rain slanted down so hard that the three had trouble seeing as far as the boat's bow. The tumbling seas, striking the boat at an angle, hammered relentlessly.

A few minutes of this made the Texans realize the futility of their present course. The waves were pounding against the boat's sides, and the laboring motors were making little headway. Taking a quick look at the chart, Barnhouse turned the bow east toward Cedar Keys. This brought the seas abeam, and the motion became a little easier, although the situation was still dangerous.

"Like straddling a large surfboard," laughed Neill.

After awhile, when they still didn't sight land, they began to feel anxiety tearing at their nerves. Suppose the force of wind

engines and put out a sea anchor, but in the restless waters it did little good.

Abandoning this idea, Barnhouse cranked one engine and ran southeast with just enough speed to keep her heading into the seas. He kept this up for three hours until the morning sun peeked over the horizon. The three peered intently in all directions, but no land was to be seen.

Putting the boat on an easterly heading, they ran for two and one-half hours, then dimly made out the land in the distance. "I believe it was the most beautiful sight I have ever seen," Barnhouse recalled, smiling faintly.

The run across the Gulf had taken 16 agonizing hours, but Cloud admitted "it seemed like a lifetime."

Whipping past Clearwater Beach they entered Tampa Bay and its complex network of twisting channels. That night it required six hours to make little more than 40 miles. In Sarasota Bay they ran onto a sand bar and had to push free.

"We were aground as much as afloat that night," Neill remembered. "We had to creep along at a snail's pace and feel for depth with a paddle."

At St. Lucie locks their timing was off. They arrived after the locks were closed for the night and had to wait more than twelve hours before they opened again. This was the longest delay of the trip.

After passing through St. Lucie locks where, as Barnhouse said, "we met a lock keeper who would rather chat than meet a schedule," the by now bearded sailors spurted up the Indian River, which "was separated from the Atlantic by only a thin finger of sand," and into Daytona Beach, "the most beautiful docking area we saw on our trip."

Soon after leaving Daytona Beach, Cloud spied some unusual activity in the water ahead. "We thought it was just a couple of kids playing on an inner-tube," he recalled afterward, "but when we got closer we realized the situation was much more serious than first imagined."

NORTHILL

DIGS FAST... HOLDS FAST... BREAKS OUT EASY



THIS LIGHTEARTED BEAUTY IS ALL FUN!

A happy combination of thrilling speed and swamp-proof safety, **SAILFISH**—and her big sister **SUNFISH**—offers your family all the *fun* of sailing at minimum cost and care. **SAILFISH**, in bright new colors, requires no dock or mooring space... rides easily atop the family car—or in back of a station wagon—rigs in a jiffy, and is easily stored.

See **SAILFISH** and **SUNFISH** at your marine dealer, or mail the handy coupon for complete information.

ALCORT, INC.

Dept. B-28
P.O. Box 1345
Waterbury, Conn.

Sailfish and Sunfish sound wonderful.
Please rush full details.

NAME _____

ADDRESS _____

turned boat, and one of them couldn't swim. After rescuing the pair and taking them ashore, which sacrificed more time, the boat ran onto the mud flat described earlier and they had to wait until the tide freed it.

The sailors were becoming more confident now. They had steered a compass course across sprawling Lake Okeechobee and had run 20 miles to the opposite shore making their landfall as planned. "Just wanted to prove we could do it," Neill said.

At St. Simon's Island they experienced their first engine trouble after the two outboards had functioned perfectly since leaving Houston. It was believed to be carburetor trouble, but after replacing the part the motor continued to sputter. A closer inspection revealed that a condenser had shaken loose.

In South Carolina another squall hit suddenly, swiftly. One minute it was dead calm; the next, winds and rain battered the erratically bouncing boat.

"The waves were rolling in so fast there weren't any valleys between them," Barnhouse said. "The boat just ploughed into the water. It sounded as if the hull were being beaten with thousands of hammers."

At Belhaven they got into more rough water. But the boat came through unblemished. Their hope of a seven-day trip had been dashed, but, as Cloud recalled, "We believe we set a time record for Houston-to-New York by outboard motorboat."

Early Friday morning, August 9, the boat rode proudly into New York harbor—roughly 2800 miles, counting all the extra-curricular runs made for refueling and miscellaneous errands, after leaving Houston. All told, the trip required 10 days, 21 hours and 2 minutes, 890 gallons of gasoline and 180 quarts of oil.

"We were exhausted and were glad the journey was over," said Barnhouse. "But we will never be sorry we made it. No apologies are offered for failure to complete the trip in the seven to nine days set up by our tentative schedule. That plan was made before we knew the effects of a southwest wind on the rivers and sounds of North Carolina, and the ease with which twisting channels can be lost in shallow bays along the way, and before we had full information on the operating hours at some waterway locks.

"We would like to challenge anybody to better time," he added emphatically.

Marking the end of their passage was the stately Statue of Liberty; all agreed it was the prettiest sight they had ever seen.

END

How Your Outboard Works

From page 35

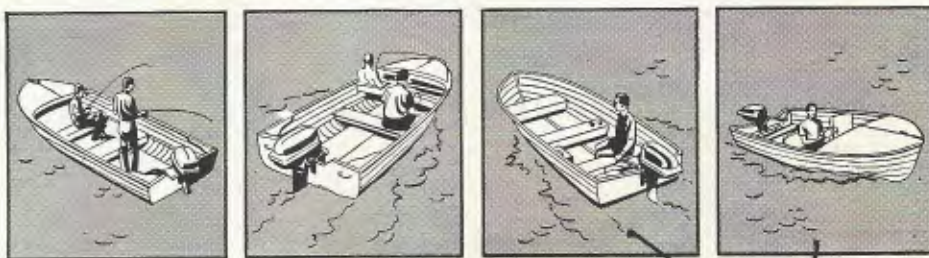
The needle valve and its seat should always be inspected when servicing a carburetor. Owing to the vibration of the motor they are subjected to quite a pounding in service and gradually the needle will develop a groove in its surface where it contacts the seat. This will change the float setting and rather than bend the float support lever it is better to put in a new needle valve assembly to set things right.

Sometimes floats develop small leaks and will not float in the gasoline and the carburetor will flood. If leaks are suspected, leave the float in a jar of gasoline for a while to allow gas to leak into it. Then plunge the float into a can of boiling hot water. The gasoline in it, if there is any, will start evaporating and the air will expand as well and small bubbles will show on the surface of the float where the air is leaking out under pressure. Shellac will make a temporary repair; otherwise it is best to put a small drop of solder over the leak. Put on as little solder as possible to avoid increasing the weight of the float.

Normally there is little that will go wrong with mixture valves and jets other than harm caused by careless or rough handling, corrosion from salt water, and abrasion from sand particles lodged in the seats and ground in when the valves are closed. They usually have packing glands around the needle shafts and sometimes these dry out or simply wear out and need replacing. The external parts of the needles get bent by rough handling and, when turned, crush the packing.

After many years of service the bushings holding throttle

fun to own
fun to handle
fun to care for!



"MFG" for '58

Fast, smooth . . . a thrill to drive. Tops for skiing, or fishing, or cruising. A real fun-boat!

There are five "MFG" beauties for '58 — two frisky 12½-footers and three sleek 15-footers — all featuring the famous tough, maintenance-free MOLDED FIBER GLASS hull, with molded-in lapstrake design. Exceptionally strong, stable, safe. Priced from only \$295 and \$495 f.o.b. factory.

See "MFG" at your dealer's, or write today for new, colorful folder.



MOLDED FIBER GLASS BOAT COMPANY • 57 Fourth Ave., Union City, Pa.

past the loose shaft and sometimes makes proper mixture ratio adjustment difficult.

When reassembling carburetors the most important thing is to be sure that all the small parts are screwed in securely. It is important too, to see that all gaskets are in very good condition. Bad gaskets cause trouble, letting gasoline leak out and be a nuisance and they let air get into the wrong passages. It is good to use a gasket compound, although it should be put on sparingly so that it will not squeeze out and drop off inside the float bowl and passages. The carburetor must be fastened to the motor with a good gasket because a bad one will let air leak into the carburetor throat and upset mixture ratios.

Outboard motor carburetors are such small, simple mechanisms that trouble shooting in them is rather easy. Once the float bowl cover is off, one can in a few moments check for dirt, worn needle seats, wrong float setting and broken or loose parts.

Tillotson Carburetors

The various models are designated by type numbers. There are several models such as MD, AJ, MS, etc., and each model comes in a number of slightly varied sizes and forms which are designated thus: AJ-8B, AJ-10B, AJ-19A, AJ-23A, etc.

Tillotson ML Series

Inlet Needle and Seat: A constant gasoline level is maintained in the bowl and all channels of the carburetor by Inlet Needle and Seat (B) and Float (A).

Idle and Slow Speed: Fuel reaching its level in the carburetor passes through Channel (P) past Main Adjustment (O) through restriction of Main Nozzle (N) and into Idle Tub (F). High vacuum or suction at Throttle Shutter (M) draws fuel up through this tube where it mixes with air at Idle Air Bleed Holes (E). This mixture continues upward through Idle Mixture Supply Holes (G) past Idle Adjustment (H) through Chan-

it mixes with additional air passing the slightly opened Throttle Shutter (M).

High Speeds and Full Power: When engine is pulling a load Throttle Shutter (M) has further opened, reducing suction and minimizing fuel discharge at (K) and increasing air flow to a high velocity through Venturi (D). This air draws fuel from outlet of Main Nozzle (N) through Internal Air Bleed (Q) causing a proper proportion of fuel in relation to adjustment to be metered at that speed range.

Gasoline Level: To set correctly, remove carburetor Float cover assembly and gasket. Turn upside down and with float lever resting on the inlet needle, bend lever if necessary to give a distance of 1-5/64 in. to 1-3/32 in. from free edge, machined face of float cover to the then top of Float (U).

When inspection indicates level continues to rise beyond setting point, remove Inlet Needle & Seat, clean their seating surfaces with a soft clean cloth. Place Inlet Needle in its seat and tap very lightly, turning Inlet Needle and Seat assembly. Do not change level from manufacturer's specifications.

To Adjust: Before starting engine close Main Adjustment (O) by turning to the right, or in, until it seats (do not force adjustment against seat); then open 1½ turns. Close Idle Adjustment (H) to its seat; then open 1 full turn.

Open throttle approximately ⅓ of its travel. Choke carburetor in usual manner, start and run until thoroughly warm. With engine running (Throttle open ⅓) slowly close Main Adjustment (O) until engine begins to lose speed, then open this adjustment (usually ⅛ to ¼ of a turn) to permit engine to regain full speed. This will be found the leanest adjustment for maximum engine power. Next close the Throttle, then set Idle Speed Regulating Screw (J) to run engine slightly faster than normal idling speed. Slowly turn Idle Adjustment (H) to the right, or in, until missing or slowing of engine occurs, then turn in opposite direction (usually ⅛ of a turn) until engine runs smoothly. Recheck adjustments after running engine at a faster



LASTING PROTECTION AND BEAUTY for Your Boat!



DURABLE PLASTIC FINISH!

* Guaranteed Not to Crack, Chip or Peel!

"How it Lasts!" say boat owners who use BoatLIFE Durable Plastic Finish. Beautiful glossy BoatLIFE tested for years under the most severe weather and water conditions. has been found to be the toughest, most flexible, finest finish your boat can have. BoatLIFE is WATERPROOF, amazingly flexible and elastic. Resistant to marine growth . . . protects against rot.

So Easy To Apply! Flaws on smoothly, even over other finishes. Dries tack free in dampest weather. Use on wood, metal or canvas. On Metal, use primer first. BoatLIFE outlasts and is superior to the finest spar varnish!

Whether you choose glistening Plasticclear, or any of BoatLIFE's brilliant colors, Blue, Red, Green, Gray, Black, Ivory, and non-yellowing Flat or Glass White, you'll be delighted with its smooth glossy surface. Ask for BoatLIFE at your dealer. Or order direct. \$3.85 qt., \$12.80 gal., postpaid. West of Mississippi add 23c qt. or 90c gal., to cover shipping costs.

WRITE TODAY FOR FREE FOLDER WITH COLOR SAMPLES
Boat Builders! Send only 10c and receive manual. "How To Select
The Right Boat Lumber" plus latest lumber list.

M. L. CONDON CO., INC.

278 FERRIS AVENUE • WHITE PLAINS, NEW YORK

Specialists in Marine Finishes and Boat Lumber Since 1912

* When
applied
properly



Model
8-G

WHAT IT IS - An All-Purpose 3-Unit stockless galvanized high strength alloy steel, lightweight anchor with entirely new, positive anchoring action.

- DIGS IN FAST yet PULLS OUT EASILY!
- HOLDS FIRM IN ALL BOTTOMS with "Lock-Grip". For boats up to 25 ft.

ONLY anchor with Flush Vertical Pull-Up! (No possible digging of fluke points into the side of boat!)

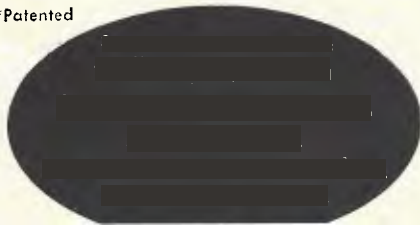
ONLY anchor recommending 3-to-1 scope, no more! Use anchor line length of 3 times your water depth.

20 1/2" long, 8" wide, Weighs only 8 lbs.

Developed and Tested for 10 years

*Patented

No Chains Required!
LIST PRICE **\$14.90** Each
F.O.B. Bristol, Pa.
Other sizes available



Regulating Screw (J) to run the engine at a good idling speed.

The approximately correct adjustments of this carburetor below 5,000 ft. altitude are: Idle Adjustment 1/2 to 1 turn open; Main Adjustment 1 to 1 1/2 turns open.

Regardless of altitude or climatic conditions a proper carburetor adjustment can be made by following these rules, thereby eliminating jet changes.

To correctly service the carburetor, check the adjustments, gasoline level and other factors. The carburetor must be free of all water, dirt and grit and when cleaning use compressed air—never a wire or drill in cleaning its small holes, but a wooden toothpick if necessary. All plug screws and nozzles must be tight. All gaskets must be in their proper place and we recommend that new gaskets be used. Choke Shutter (S) must be in full open position when choke control is pushed all the way in.

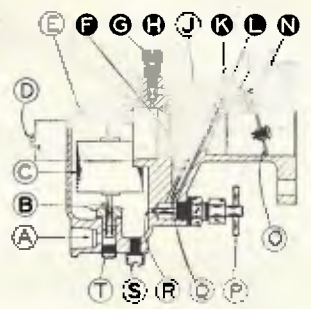
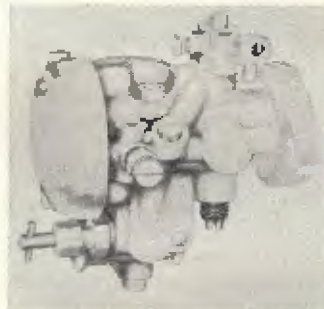
Flatness When Accelerating: Readjust carburetor in accordance with rules outlined above, bearing in mind that either a rich or lean adjustment causes flatness. Check and correct gasoline level. Remove dirt restricting gasoline flow through idle tube or at idle outlet (K). Remove collection of lint from Main Adjustment.

Stalling of Engine: Tighten throttle lever to shaft; reset Idle Speed Regulating Screw (J); check and correct gasoline level; inspect Idle Adjustment (H)—its adjustment point must not be ringed; check and correct conditions under heading of "Flatness When Accelerating." Inspect throttle shaft for undue wear.

Tillotson AJ Series

Inlet Needle and Seat: A constant gasoline level in the bowl and all channels of the carburetor is maintained by Fuel Inlet Valve and Seat (B) and Float (C).

Idle and Slow Speed: Fuel reaching its level in the carburetor passes through Channel (R) past Main Adjustment (P) and into Idle Tube at Orifice (Q). High manifold or suction at Throttle Shutter (O) draws this fuel upward through Outlet Orifice (L) where it mixes with additional air passing the slightly opened Throttle Shutter (O).



Exterior and cross section of Tillotson A-J carburetor

High Speeds and Full Power: When engine is pulling a load, Throttle Shutter (O) has opened further, reducing suction and minimizing fuel discharge at (N) and increasing air flow to a high velocity through Venturi (F). This air draws fuel from Main Fuel Outlet Tube (H) supplied from bowl through Channel (R) past Main Adjustment (P). As engine speed or load increases air is automatically bled into the Main Nozzle through channel (H-1) which causes a proper proportion of fuel in relation to adjustment to be metered at the speed range.

Gasoline Level (D): Is approximately correct when 11/16 of an inch below bowl rim. Float (C) is positioned on Valve Stem (B) between 2 encircling slots and held by spring cotters. A constantly higher than normal level requires careful valve and seat cleaning or replacement. To replace Inlet Valve and Seat Assembly (B) first remove Cover, Plug Screw (T) and top Spring Cotter encircling valve. Force valve downward until parallel with Float Top then with thumb and forefinger draw valve through bottom of bowl. Float and lower spring cotter will fall from Bowl—socket wrench can now be used to easily remove valve seat.

To Adjust: Run warm motor at a good speed, then slowly close Main Adjustment Screw (P) to the right, or in, as far as

Stamas **BIG 19' CLEARWATER** for '58

Photo Taken at Cypress Gardens

Write Dept. A for Literature and Name of Nearest Dealer.

Stamas
BOATS INC.
TARPON SPRINGS, FLA.

panel. Retard spark or magneto timing lever to left of center until stalling point of motor is approached. Now slowly close Idle Adjustment Screw (G) to the right, or in, until motor slows down—then open until motor speed increases. When motor speed does not increase further, a smooth and steady idle will be obtained and this will be the correct adjustment. Advance Magneto Timing Lever and run motor at a good speed for a few moments, then recheck adjustments outlined in preceding paragraph.

Tillotson MD Series

Inlet Needle and Seat: A constant gasoline level in the bowl and all channels of this carburetor is maintained by Inlet Needle and Seat Assembly (C) and Float (F).

Idle and Slow Speed: Fuel reaching its level in the carburetor passes Main Adjustment Screw (T), through channel (W) and into Idle Tube (L). High manifold vacuum or suction at Throttle Shutter (G) draws this fuel upward past Idle Tube Outlet Orifice where it mixes with air from channel (P) adjusted to requirements by Idle Adjustment (O) through Channel (J) and into air stream at Idle Discharge Ports (H) where it mixes with additional air passing the slightly opened Throttle Shutter (G).

High Speeds and Full Power: When engine is pulling a load, Throttle Shutter (G) has opened further, reducing suction and minimizing fuel discharge at (H) and increasing air flow to a high velocity through Venturi (R). This air draws fuel from Main Nozzle (Y) supplied from bowl past Main Adjustment (T) through Channel (W). As engine speed or load increases, air is automatically bled into the Main Nozzle through Tube (U) which causes a proper proportion of fuel in relation to adjustment to be metered at that speed range.

Float Setting: To check (E) correctly, separate Fuel Bowl Assembly from Upper Body Assembly and Gasket. Then with Fuel Bowl Assembly held in upside down position, the then lowest point of the float, at free end, should project $\frac{1}{8}$ of an

inch below rim of fuel bowl. If resetting is required, remove float and slightly bend vertical float lever to obtain proper measurement. When inspection indicates fuel level continues to rise beyond float setting point, remove Inlet Needle & Seat, clean their seating surfaces with a soft cloth. Place Inlet Needle in its Seat and tap very lightly, turning Inlet Needle with thumb and forefinger several times to reseal. Reinstall, then if proper fuel level is not maintained, install new assembly. **END**

In Search of the Sun

From page 34

Pine Sound, stopping during a noon calm to swim and admire a frigate bird, which Jane recognized as it circled gracefully high above us.

Early next morning we passed the tiny village of St. James City, its few tumbledown buildings and palm trees shrouded in mist, and again wished we had more time for exploring. But we headed on past Point Ybel, then north up San Carlos Bay, and finally powered up the Caloosahatchie River to the Fort Myers yacht basin.

We voted it the prettiest yacht basin on Florida's west coast. It is bordered on three sides by palm trees, and there are even a few blue water hyacinths floating lazily about—hazards to navigation in the canal, but a colorful sight in the basin.

In general we received a royal welcome at Fort Myers—prompt service with handling lines on our arrival, an interview by Capt. Ernie Hall for the local paper, hot showers, and freedom of the Civic Center across the street from the Yacht Basin. There was temptation to linger, but we had been well-bitten by the cruising bug and had changed our plans so as to lengthen our passage to the coast by sailing around Florida instead of taking the cross-state canal.

The decision to go south-about was a happy one. We had beautiful sailing off that southwest coast, never equalled by any other cruising that we've done.

Reversing our course, we sailed down the Caloosahatchie and

Our Latest Booklet "HOW TO KEEP BOATS WATERTIGHT"
IT'S FREE at your DEALERS or WRITE DIRECT

Contains our Famous COMPOSITE BOAT CHART showing which one of our products to use, and where for best results, it also illustrates and describes our 19 Great Elastic Marine Products.

Ask Your Dealer About the NEW! KUHLS Products

Grumman

Sterling Mark of Quality in Aluminum Watercraft

GRUMMAN CUSTOM RUNABOUT
Inboard Style — for Outboards

QUALITY IS THE DIFFERENCE In Modern Outboard Styling

GRUMMAN'S Custom Runabout for '58 — stern section streamlined with sport fins. Fully styled for pleasure cruising with outboard motors from 15 to 50 hp. Choice of colors. Outfitted with deluxe cushions and trim. Inquire about the other Boat and Canoe models in the Grumman fleet.

For Coastal Waters—GRUMMAN'S exclusive Navy-type process gives lasting protection against salt or brackish waters.

FREE! Write for GRUMMAN'S 1958 Catalog and Dealer's Name



Product of the World's Foremost Builder of Amphibious Aircraft

GRUMMAN BOATS, INC.

4828 South Street Marathon, New York

first and finest in aluminum watercraft

spent a night at Snug Harbor. This is a small, but hospitable, marina on Estero Island, at the north end of Fort Myers Beach. This is another spot that we would have liked to explore, with its coconut trees and white sand beaches, but we resisted the temptation, thinking of the many sea miles we still had to cover before reaching the Keys and, eventually, Florida's East Coast.

At Marco, where we tied up at the G. & G. Mercantile Company dock, we caught up with *Zephyr*, hauled out at the boat yard. The town of Marco merits a longer stay than we could make, and next day we started up the Big Marco River, making a short cut to Gullivan Bay and avoiding Cape Romano and its outlying shoals. In Indian Key Pass we decided not to make the run of ten miles up to Everglades City, but pushed on to the Little Shark River, where we sailed up a well-marked channel to an anchorage close under the mangroves that line the river bank.

In Florida Bay we experienced extremes of wind and calm. In company with some fishing boats we rode out a half gale at anchor behind Sandy Key, then, after a day and a night, ventured out, heading for Schooner Bank and, eventually, the Keys waterway. But the wind freshened again, and we made for Nine-mile Bank. The seas were steep and the breeze strong—but the sun was bright so we slogged along under sail and power until we found an anchorage back of Ninemile Bank—a shoal that is covered at high tide, but which gave us good protection from the seas.

Our third day in Florida Bay dawned bright and sunny with the wind somewhat lighter. We moved away from our protecting bank and through the winding channel across the shoals. Then, suddenly, we were in calm water, with Long Key only five miles away.

Those last five miles were a real joy. We cut across the intra-coastal waterway at Old Dan Bank and headed southeast for an anchorage between Long Key and Jewfish Key. We were not more than a quarter of a mile from the Overseas Highway and it seemed unreal to watch automobiles whizzing past.

From Jewfish Key, where we found a Post House and overnight cottages operated by the Greyhound Company, we felt we were approaching the end of our long cruise. Lignumvitae Key, Tavernier—where we enjoyed fresh turtle steaks while waiting for a norther to blow itself out—and Blackwater Sound were noteworthy stops. Eventually, about mid-afternoon of a bright day in late December, we picked up a black beacon, turned west and, following the channel markers, tied up at Dinner Key—six months after casting off our lines in Mobile Bay. END

Joins Evinrude Motors

EDWIN W. HANSON has been appointed assistant public relations manager of Evinrude Motors, of Milwaukee, Wis. The announcement was made early in January by Howard F. Larson, director of sales and marketing for Evinrude.

Prior to joining Evinrude, Hanson had spent ten years as sports editor of the Wisconsin Rapids Daily Tribune and also was sports director for the Wisconsin Radio Network and Station WFHR, in Wisconsin Rapids.

Fishermen's "DREAMBOATS"

**SEA—WORTHY
LASTING QUALITY
RUGGED—LOW PRICE**



The 24' "EIDER" \$4,200.00 (less engine)



The 18' "DUCK" \$1,800.00 (less engine)

Seldom can the marine trade offer more in a boat than we offer here in the two sea-worthy Fishermen's "DREAM-BOATS" that makes boating as safe as can be, with dependable inboard power, gas or diesel.

INTERNATIONAL YACHT SALES

604 Kerr Bldg., Detroit 26, Mich., U.S.A. Tel.: WOODWARD 5-6488

Cruising

Oil bags and sea anchors are deliberately omitted from this short list. These are devices for deep-water cruisers and rarely of any use in coastal cruising. It is much more important to make sure you have good basic gear in working order than to load your boat with fantastic extras.

But you should think over carefully how your normal gear will function under exceptional conditions. The spare anchor should be a big one. The spare anchor line should be long and strong. Often the ability to anchor in fairly deep water makes the difference between an easy situation and one that means a real battle.

In a sailboat, consider how a small jib may set as a storm trysail. And make sure the jib you nominate for heavy weather duty is in good shape. You may not use it all summer—but when you want it you will want it badly, and if it starts blowing to pieces you may be left with no way to move your boat in a useful direction.

A large mass of doubtful gear that won't stand up to strain can produce real trouble fast when you need to maneuver your boat with confidence. Your hands are full enough doing this without worrying about whether a line will hold or whether the engine will run. The best rule is to keep gear simple and to make sure the gear that is important in heavy weather is the gear that works and is sound. The best place for a dozey piece of line is overboard.

Winter is an excellent time to lay everything out and check it over. The cellar floor, the attic, or the garage floor is an excellent place. Have you got what you need? Is it in good condition? If you find a "maybe" to either of these questions in going over your checklist, spend money on new, sound gear to turn that doubtful answer into a firm "yes."

And try reviewing your own thinking. If you have only one anchor, and an old fashioned one at that, why not get a modern anchor of proved design, and buy a good new nylon warp to go with it? Then you'll *know* that when the situation calls

You Get More with Arkansas Traveler



Marquise
15-ft. Custom
Sportsman

Arkansas Traveler *performance* is a revelation—you literally ride on air! You ride in *beauty*, too. The Marquise, shown above features a delicate blending of lustrous Fiber Glass and aluminum—the graceful compound curves of a one-piece, die-formed hull. Ask your Dealer about Arkansas Traveler *quality* and *dependability*—the new **GUARANTEE**—the 19 models for '58. See him, or write us for free catalog.

ARKANSAS TRAVELER BOATS, 2023 E. 14th St., Little Rock, Arkansas

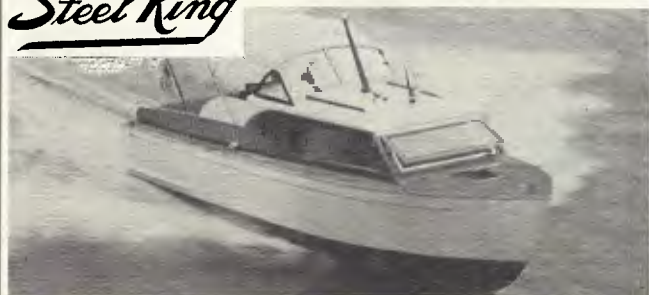
A Division of Standard Railway
Equipment Manufacturing Company



**arkansas—
traveler**

Steel King

26' EXPRESS



HOUSEBOATS 32'-60', CRUISERS 24'-42'

Write for Literature—State Size and Type Interested In
GRAFTON BOAT WORKS Box 67—Phone 85
GRAFTON, ILL.

by Dahmer

In White & COLORS for Boats 16 to 60 Ft.

EITHER MODEL CAN BE USED ABOVE OR BELOW THE WATER LINE

MODEL "H" (illus.) Hardwood seat, white enamel, chrome plated hardware. SIZE: Height, 15"; Width, 17"; Dia. Bowl, 13"; maximum distance front to rear 18" (90° tailpiece). Straight tailpiece if required. May be changed to right or left hand operation. **Price Only \$60 (in White)**

COLORS ONLY \$72.50. Blue, Green, Yellow, Rose, (Seat to match) Strainer INLET for above (with tailpiece) 3/4"—each \$3.90. OUTLET for above 1 1/4"—each \$3.40.

MODEL "L" (For Small Boats) Seat cast in vitreous China Bowl (Straight Tailpiece) Height 12" Width 16" Front to rear (max) 16" incl. Handle. **PRICE (WHITE) \$67.**

COLORS (Blue, Green, Yellow, Rose) \$69.50. 3/4" INLET \$2. OUTLET 1 1/4" \$3.90 — INLET 3/4" (Built-in Strainer) \$3.50.

MAIL ORDERS TODAY FOR PROMPT U. S. SHIPMENT. Special Facilities for Export.

(Prices F.O.B.) Also Mfgs. "Rust-Kleen Filter"

BIG 72 PAGE MARINE HARDWARE CATALOG B ONLY 25¢



ARE YOU GOING TO SCRAPE, CAULK, PAINT, IN '58? RESOLVE



for anchoring fast, you can anchor. Period.

There is no time to start thinking about the gear you carry when it starts to blow.

Rule 3. Know Your Waters

A good general studies a battlefield until every knoll is etched into his memory. He considers and reconsiders every eventuality he can think of until, when the time for action comes, the problems he meets are already familiar to him. This rule of prestudying a situation gives you the great and valuable advantage of freeing your mind for full, undistracted attention to the part of the problem that is new.

A good small boat skipper knows where the tide stirs up a chop over a bar—and even if he has never seen that bar at the last of the ebb in a strong wind, he knows it will be a place to avoid. More than that! If his normal course back to shelter takes him across that bar, he has already thought out a good alternate course, or found a good alternate harbor to head for on his chart.

It does not demand enormous knowledge to begin this elementary review of the waters you cruise in. Haul out a

chart now, on a winter evening. You'll have fun remembering what the sea was like in different places on different days. You will find that the sectors you cruise in, which in heavy weather become a battleground, can begin to live in your mind.

Rule 4. Watch the Weather

Wind and water can always produce surprises. But they do tend to act according to certain patterns in any given region. You can fill in gaps in your own experience by remembering what you have heard of others' experiences on a given day when the wind turned nasty.

In looking at the weather before you set out, it is presumed that you will not want to dive carelessly into a making storm. Real summer gales are usually easy to spot as they make up, often hours and hours before wind and sea get up to troublesome proportions. Merely being outdoors makes most people this sensitive to weather—sensitive enough to recognize a really threatening day. But beyond this, it is possible to learn local phenomena that give longer advance warning of bad

weather. Unusual visibility is often such a sign. If you have the habit of studying the sky and the horizon you can spot such phenomena and take note of them.

Weather reports are valuable for general probabilities or to learn the location of a major storm or hurricane. If the best forecast you can get indicates settled weather, you can certainly put out with more confidence than if it indicates a likelihood of trouble. But at the present stage of weather forecasting, it is foolish in the extreme to count on official weather reports for any but general information. You can easily get high winds and crested seas with no warning at all from the weather bureau.

In case this statement seems doubtful, let me report an instance when a well-found small sloop was staggering under triple-reefed main and storm jib while weather reports at that time spoke of nothing but gentle-to-moderate steady breezes throughout an area of hundreds of miles. A flagrant example, surely—but also a warning. Another case comes to mind where a 42-ft ocean racer, completing a cruising passage from Spain to England in the spring of the year, was forced



Baycraft 17' MASCOT DELUXE — OUTBOARD UTILITY



SEND 25¢
FOR CATALOG

Promote yourself to captain. Build your own Baycraft outboard prefabricated boat with a surprisingly small investment of time and money. Other models available from 20' to 34' deluxe cruisers.

BAY CITY BOATS, Inc. 1833 First St.
Div. 4028 Bay City, Michigan

LEHMAN ECON-O-POWER CONVERSIONS



For all FORD • MERCURY
LINCOLN • JEEP • CHEVROLET V8
ENGINES

Sold and serviced by ECON-O-POWER
dealers throughout the United States.
Openings for a few qualified distributors.
FREE! Complete catalog with prices.

Lehman Manufacturing Co.

MARINE POWER ENGINEERING SINCE 1932

972-T Broad St., Newark 2, N. J.

to heave to under storm canvas for a 12-hour blow which arrived absolutely without warning.

Such cases are unusual and I mention them only to underline a point—they really happened, and there was no warning.

Throughout most of the United States, the summer thundersquall is the greatest threat to small boats. It cannot be predicted with anything like certainty and it can produce extremely violent winds of short duration. It is easy to spot such a squall locally before it hits. Usually there is time to take shelter. If there is not time for this, it is important to know that these squalls are almost invariably of quite short duration so that you can well afford to drop anchor and sit it out rather than try to fight your way home through it. Some small boats simply will not stand up to any sail in a really violent thundersquall, and the sensible cruising skipper gets sail off before it hits.

Watch the weather. Above all watch for changes in the weather. Get radio forecasts by all means, but do not close your eyes when forecasts are reassuring. The changes of weather which you can learn to observe almost unconsciously often hold the vital clue you need to developments in wind and sea that will be important to the safe passage of your boat in open water.

Rule 5. Seek Shelter Early.

The best place to be when heavy weather sets in is out of it. The way to get out of it is to be alert at all times for quick, short routes to shelter.

If you have ever had the experience of being caught out on a bad gamble, you know how foolish this can make you feel. Don't play games with bad weather unless you want to find yourself fighting for your boat's safety at midnight when you could have been asleep in bed at home by heading in earlier to an alternate port.

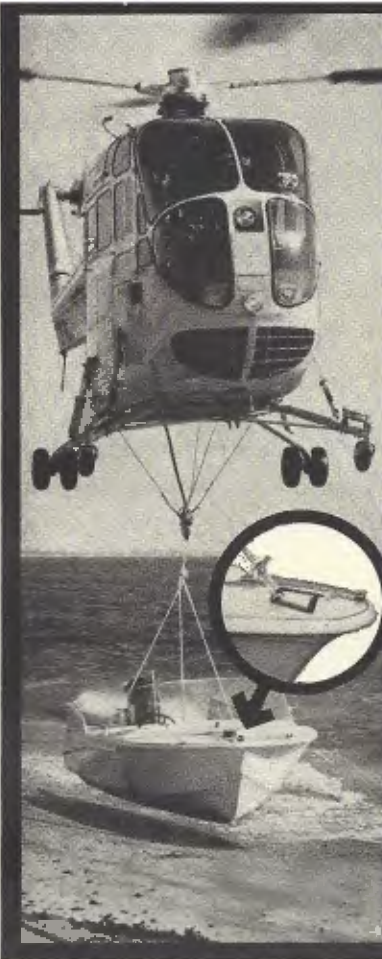
The first rule for seeking shelter is to know at all times the quickest way to get there. Then relax. If suspicious changes occur in the weather, if the wind comes on savagely at sunset instead of dying down, you will know where to head in.

Shelter of any kind is better for a small boat than no shelter. Most sudden turns for the worse in the weather will not last long, and it is better to anchor under an island or a headland than to keep plugging into bad conditions too long.

Always remember that a small boat is dependent on the land when the wind and sea get up beyond a certain point. It is easy to get into port early; sometimes it is dangerous to do it later.

Rule 6. Slow Down—Fight for Space and Time

If wind and sea become dangerous in your judgment—and remember, you as skipper are the only judge—then it is time
(Continued on page 69)



Actual photo of Daman helicopter picking up Glass Craft boat by lines attached to AQUALOY fittings.

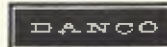
NEW NYLON DECK FITTINGS PROVED TOUGH BY TEST

the amazing
AQUALOY
Trade Mark

An entirely new concept in modern marine boat equipment, AQUALOY offers absolute CORROSION resistance... strength... in feather-light, modern styled stern handles, bow handle, 6" forward cleat, 3½" aft cleats, and chocks—as well as both bow and stern lights. Never needs polishing. **IN EXCITING, PERMANENT COLORS**—red, light blue, brown, aluminum and bronze. Complete deck fitting kit (less lights) ... only \$11.95

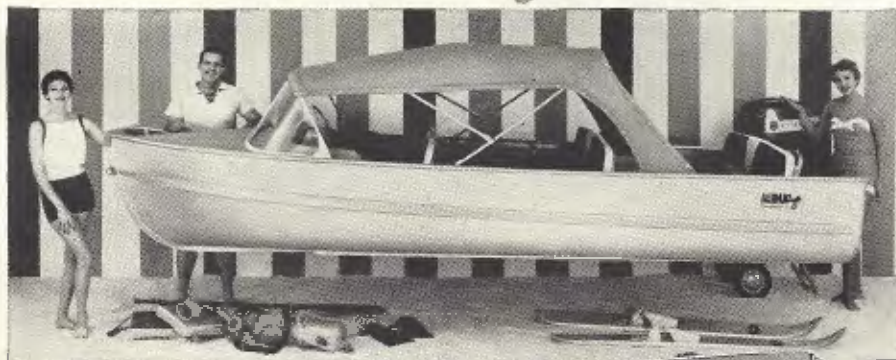


For the interesting story of AQUALOY, the first NYLON deck fittings, write for NEW descriptive literature. Free.



THE DANIELSON MANUFACTURING COMPANY
A SUBSIDIARY OF NICHOLSON FILE COMPANY
166 HOLT STREET • DANIELSON, CONNECTICUT

Newest **ALUMA** Craft CATALOG Now Ready



● Send for this complete presentation of the newest in boats, runabouts and canoes. Shows 26 models, including 2 new Aluma Glass runabouts, in full color exactly as you would see them at the big boat shows. See new styles, new ideas, new sizes with a range of prices to fit every pocket-book. Now ready. Write for your free copy.

ALUMA CRAFT BOAT COMPANY

1503 Central Ave. N.E. • Minneapolis 13, Minn.



Our designs and construction have set many new boating industry standards for style, performance, safety and strength. Aluma Craft require practically no upkeep. Write for catalog.

SELECTED MARINE LUMBER

FOR BOAT BUILDING AND REPAIRS

- Virginia White Cedar • Western Red Cedar • Sitka Spruce Mast and Spar Grade
- Oak • Teak • Philippine Mahogany • Honduras Mahogany
- Cypress • Long Leaf Yellow Pine • Fir and Mahogany Plywood
- All thicknesses for marine use • lengths up to 16 feet!

Ripping and Planing Facilities Available In Our Fully Equipped Yard. Send only 10¢ and receive boat lumber manual, "How To Select The Right Boat Lumber" plus latest lumber list and prices.

Boat Lumber Specialists Since 1912

M. L. CONDON CO., INC.

278 Ferris Avenue,
White Plains, N. Y.

The Year Round Boat Show

From page 13

Four New Models In Twin Trailer Line

FOUR NEW MODELS will headline the Twin Trailer line for 1958. These Twin brand boat trailers, according to a company announcement, will be versatile enough to fit nearly every boat, every wallet, and every taste. In keeping with the increasing popularity of trailing boats overland, the new Twin Trailer models are designed not only for safe and convenient trailering but for easy loading and launching as well.

Among the outstanding features of these new road-tested Twin Trailers are the arc-flow individually sprung wheel suspension, the even keel tandem springing system, Adjusto-Wate, and the multiple lift roller assembly. Two of the new models, the UB 200 and UB 201, spotlight the "A" type frame construction, all steel electrically welded for extra strength, with the popular tilting bed. The UB 200 is a 16 ft model with 8 in.

wheels and 800 lb capacity. The UB 201 is an 18 ft model with capacity of 1000 lbs and 12 in. wheels. Both of these models also have a new type adjustable cam action cradle called "Flip-Away."

The two other newcomers to the line are of the Twin Trailer standard boom type. These two models, the XB 110 and XB 112, with fully rolled tongues of 14 ft and 16 ft and weight capacities of 600 lbs and 750 lbs respectively, are modestly priced, the company says. A new combination tilting and safety chain device and a wider usage of roller type cradle are among other features of the 1958 Twin Trailer line.

C & F Machine Works, 440 West Minnehaha Avenue, St. Paul 3, Minnesota

Commodore Uniform Adds Jewelry To Line

COMMODORE UNIFORM CO. supplies the nautical, and nautically-minded world with not only yachting attire (formal, informal, and foul-weather gear), but also, through its nautical supplies division, a variety of articles suitable for boat owners. Newest addition to their numbers is the nautical jewelry of His Lordship. This is an extensive line of items for men and women, featuring unusual novelties in pins, earrings, cuff links, charms, lighters and so on.

Commodore has prepared an extensive new catalog, fully illustrated, describing the many articles that it stocks. The merchandise categories listed include apparel, accessories, furnishings, supplies, navigation equipment, gifts and gadgets for the galley.

Furnishings for the boat itself, from Commodore, include mahogany dish racks, ship's bells, serving trays, link-rubber mats, bunk spreads, draperies, guest books, and imported Belgian linen tableclothes, all with the proper nautical touch incorporated.

Commodore Uniform Co., 349 Broadway, New York 13, N. Y.

(Continued on page 70)



Twin Trailer A-frame UB 201 has a capacity of 1000 lbs.

plenty of Z-O-O-M and Z-I-P!



31' Steel-Clipper Flying Bridge Sedan • Sleeps 6

A roomy comfortable 31' family cruiser. Designed for high speed operation in rough going and ... "Speed with Safety" ... due to the sturdy plastic steel hull! Optional horsepower to provide thrilling speeds, if desired. Also 26'—28'—35' and 40' models. Hulls and partly completed boats. State size interested in!

INLAND SEAS BOAT CO. 2037 First Street
Sandusky, Ohio

You're Off
to a **Fast Start**
and a **Strong Finish**
with **Silicone-Added**



anti-fouling, fast red

REGATTA
VINYLTEX-55

to start fighting. Plot where the wind and waves are carrying you. Figure out dangers, work out alternate courses to avoid them. Don't push ahead too long too hard just because that is the only course that has occurred to you.

Sooner or later everyone has to deal with bad weather that has simply arrived while you are still out. This is not the time to panic; it is the time to start thinking and helping your boat to fight. Continue pushing for shelter, by all means. But do it the sensible way. If you are in gusts of overpowering violence, take care of the boat first. Head her up into it, run off before it, or best of all anchor. Every hour you are afloat and in control of the situation is another hour nearer the end of the blow—for all blows do end.

If you think your way through the situation, it is easier to keep track of where you are and where you are being driven. If you are being driven in a dangerous direction, fight for every inch. Sooner or later, usually sooner than you think, there will come a lull or a shift in the wind that will enable you to make good a useful course toward shelter.

Rule 7. Stay with the Boat

When the worse comes to the worst in a small boat, she may sink or go ashore. Fortunately the small open boats most likely to fill with water are usually able to keep afloat in a waterlogged way in that condition. *Stay with the boat.* She is your best life preserver and your best distress signal. If you merely hang on there is little danger to life. If you try to swim for shore the danger is extreme, as the newspaper stories that are printed every summer will warn you. A disturbed sea will weary the hardest swimmer much faster than he thinks. If the wind or current is setting your boat toward shore, ride in to shore with her. If she is being set out, then it is virtually certain that anyone making the attempt to swim in will drown. This rule has been tragically proved again and again and applies with-



set your family's course for Pleasure

Winner boats are designed with the entire family in mind. Minimum maintenance for Dad... exciting performance for the younger set... maximum safety features for Mother's peace-of-mind. For water sports, for fishing, for leisurely cruising, Winner 12', 15', 17' and 19' models are outstanding performers wherever your family's boating interests point. Write today for our free, illustrated literature.

Winner MANUFACTURING COMPANY, Inc.

103 Railroad Avenue • West Trenton, New Jersey

World's oldest and most experienced manufacturer of Fiberglass boats

out discrimination to good, bad, and indifferent swimmers.

If you can't keep your boat off the shore—and this can happen, and has happened to good sailors—drive her straight on into it. Tell everyone to hang onto the boat. Even in a bad surf, her hull will be cast up on dry land whereas a swimmer will get caught in the undertow.

But these are disaster measures and only point out what is pretty obvious. Long before a disaster point is reached, the essential of safety at sea is to stay with the boat.

The boat will never stop fighting if you

stay with her and help her. Anchor if you possibly can. In really terrifying seas, trail lines and run off before them. The lines help break the sea and slow the boat down, which is vital to control in a following sea. Watch how the boat behaves no matter what you do with her. You will soon learn that she is happiest if she is kept slowly edging into or away from the sea. Step by step she can fight her way to shelter, even if she has to come in the next morning, the long way round.

Stay with your boat, watch for her, help her to fight. This is a basic rule that every good skipper knows. **END**



PAR

THE MOST USEFUL PUMP IN ANY BOAT from 12-foot "car-top" to twin-screw cruiser!

- Transfers fuel to tanks, outboards, stoves—faster than siphoning, neater than pouring—no splashing, no fire hazard.
- Drains engine oil through dip-stick hole, cleans oil filters—fast, no dripping, no mess.
- Dries bilges, scavenges water lines and tanks, removes trapped water.
- An efficient small boat pump—2 gallons per minute. Great for fishermen to carry in tackle box.

Less than a foot long, has all PAR big pump features: Instant action, no priming, no ailing, no clogging, easiest of all pumps to clean. Built to last a lifetime.

"HANDY BOY" PUMP OUTFIT No. 3799

At boat or sporting goods stores, or write:

PETERS AND RUSSELL, INC.

World's Largest Builder of Hand Pumps
515 W. LIBERTY ST., SPRINGFIELD, OHIO



LIGHT DISPLACEMENT

KITS and SEMI-FINISHED BOATS

Winners of many races! Trail easily behind the family car. 4 full bunks below. Full headroom, galley, toilet, stowage space. Light displacement means lower cost.

AMPHIBI-CON 25'8"x7'9"x2'4", 3900 lbs.
Kit \$1,795. Semi-Fin. \$3,750. Fin. \$6,450.
AMPHIBI-ETTE 24'x7'9"x2'4", 2300 lbs.
Kit \$1,275. Semi-Fin. \$2,800. Fin. \$4,500.

More than 50
built from Kits!

WRITE FOR ILLUSTRATED FOLDERS!

The **CONTROVERSY**

Created by
MOUNT DESERT YACHT YARD, INC.
Builders • Designers • Importers • Mt. Desert, Me.



Modern Auxiliaries

A 35-ft Cruiser-Houseboat

DESIGNED FOR the low price field, the Pleasant Waters cruiser-houseboat has a steel hull 35 ft long with a beam of 11 ft. The superstructure is of mahogany marine plywood with large, screened, window areas and a combination sundeck-flying bridge topside.

The main salon measures 13 ft by 10 ft and there is a snack bar-galley, head, shower, and air conditioning, plus ample locker space. Stateroom arrangements can sleep as many as eight people without, the manufacturer points out, having recourse to converted dinette arrangements. On the after deck there is an 11-ft cushioned seat, and space for chairs.

These cruiser-houseboats are said to be capable of 15 mph, and the hulls are reported to have great stability. They are built by The Pleasant Waters Company, 1445 North Fifth Street, Milwaukee, Wisconsin.



The Pleasant Waters houseboat has steel hull, marine plywood superstructure. Headroom throughout the cabin is 6 ft 4 in.

Munro Introduces the Interceptor



A new model by Munro Boats-Motors, Ltd., of London, Ontario, Canada, is the Interceptor. It is of all-fiberglass construction, reinforced to take the largest outboard motors. Length is 14 ft, beam 5 ft 4 in. It has built-in fiberglass seats and seat backs and walk-thru center deck.

BOAT PLANS



MARBLEHEAD "23"

BOOTH B-7 . . . NEW YORK SHOW

BOOTH 130 BOSTON SHOW

FOR YEARS this famous Down-Easter has been the queen of her class. Round bilged, non-pounding, more solidly built . . . a real "heavy weather" hull. And she's fast, too—goes places in a hurry! 23' 4" x 8' x 2' fully equipped. Write for brochure.

**ELDRIDGE-McINNIS DESIGNED
MAINE BUILT**

Wm. F. Slaymaker
160 Willard Ave.
Newington, Conn.

Falmouth Marine Railway
Falmouth, Mass.

Chatfield's Marine Basin
Freeport, Long Island, N. Y.

MARBLEHEAD BOAT YARD CO.

POOL ROAD

BIDDEFORD, MAINE

Seagull BOAT FITTINGS



Advance styling . . .

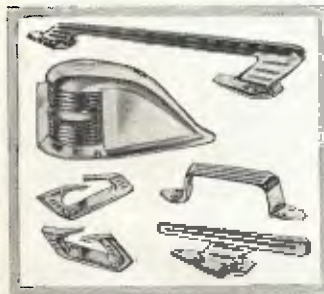
yet engineered for practical installation and rugged use on water. Manufactured by a company with nearly fifty years know how in the boating field.

KAINER Seagull GLEAMING CHROME DECK FITTINGS



Note to Boat Builders and the Trade:

The Kainer Seagull Line is not just a few specialties! **Here is a line of boat equipment complete.** A line to make a selection from, chrome on bronze—special aluminum alloy—special chrome on zamak. Many styles and sizes to suit different boat models and at sensible prices. **Please write us for catalogue.**



BARBOUR BUILDS BETTER BOATS



For Performance
Safety and
Comfort.

16' VACATIONER
21 MODELS
from
12' to 22'
OUTBOARD — INBOARD



19' Silver Clipper

BARBOUR BOATS, INC.

NEW BERN, NORTH CAROLINA

The Nordic 19 By Century Boat Co.



A fold-back disappearing top and an unusual back-to-back seating arrangement feature Century's new Nordic 19. The heavily-framed hull is lapstrake planked with 9/16 in. African mahogany. Power is a Gray 6-cyl, 109-hp engine that produces speeds up to 34 mph.

Flagship Marine Features V-8 Engines

THREE V-8 engines comprise the 1958 line of Flagship Marine Engines, Inc., Lynch Cove, Baltimore 22, Md. Model 220, rated at 220 hp, is stated by the manufacturer to be suited to the entire range of pleasure boats from 16-ft runabouts to cruisers, and for heavy work boats. The model is made for single or twin installations. It weighs only 690 lbs, including reduction gear, and is recommended for operation between 2400 and 3000 rpm.



R. D. Prouse, service manager of Flagship Marine Engines, Inc., inspects a Model 220 (left) and a Model 310 Custom Competition engine.

COMPARE "hull protection"



and sooner or later
YOU'LL OWN A GATOR!

TRIGGER-ACTION



for runabouts

FINGER-TIP CONTROL



for outboard cruisers

Gators are kind to your boat! Equalized hull support of transom, bow to keel, on a unitized frame, assures complete hull protection during transit and storage (eliminating danger of hull distortion that can ruin your boat). **COMPARE**—you'll find this is just one of the many reasons experienced boatmen prefer Gator Boat Trailers.

A COMPLETE LINE OF MODELS TO MEET EVERY TRAILER NEED FOR OUTBOARD RUNABOUTS AND CRUISERS UP TO 22'. SPECIAL TRAILERS FOR MANY TYPES OF INBOARD AND SAILING CRAFT.

Peterson Bros., Inc.

Ft. Wayne, Indiana - Reno, Nevada
Jacksonville, Florida

FREE COLOR CATALOG!

Peterson Bros., Inc., Dept. B-16
Box 51, Station G, Jacksonville, Florida
Please send illustrated catalog and name of nearest Gator dealer.

Name _____

Address _____

City _____ Zone _____ State _____

U-MAK-IT BOAT KITS

Save 1/2 the cost. Build your own. Our greatest line in thirty years. 30 models, prams, rowboats, outboards, Cabin Cruisers. Easy to assemble.

NEW LAPSTRAKE SKIFFS



SEND FOR ILLUSTRATED CATALOG
Showing all models 8' to 23'.
Const. details, paints, access.,
etc. All you need to build your
own. **MAIL 35c (coin) FOR
POSTAGE & HANDLING.**
Dealer Inquiries Invited



U-MAK-IT

products

DELAND, FLORIDA.—DEPT. 3

Sturdy Aluminum Raft

DESCRIBED as "an 8 ft square island of fun," the Aluma-Raft is a float that is at home in rivers, lakes, or in protected harbors. Supported by five 8-inch non-rusting aluminum tubes, it is reported to be light and easy to handle, yet rugged, buoyant, and almost non-capsizable. It is suitable for swimming, sun bathing, water ski take-offs, or as a landing float. It is made by Aluminum Tubing Company, Jacksonville, Florida.



Boating people will find many uses for the Aluma-Raft. The boat shown alongside the Raft is a 17-ft Borum Voyager.

Tomahawk's 1958 Ski Mate

DESIGNED with the water skier in mind, the Tomahawk Model G1564 Ski Mate is intended for use with motors from 20 hp to 60 hp. It is one-piece molded fiberglass, with canted tail fins to conform with current styling preferences. The flared bow sections and underbody lines were designed to give speed and maneuverability with safety. The Ski Mate is 15 ft long, has a beam of 5 ft 4 in., and weighs 350 lbs.



The 15-ft Tomahawk Ski Mate is made of molded fiberglass.

CASE REPORT

Eng Time	Debris
43 Hrs.	3/4 lbs
76 Hrs.	1-1/8 lbs

Seaweed, cigarette butts,
tissue papers, garbage, etc.

*why a
cooling water
strainer...*



This is an actual, unsolicited report of a logged installation of a Kraissl strainer—for normal cruising in New York-New Jersey waters! That's the kind of water you're pumping through your engine for cooling. That's why you're running hot—why you can't expect full efficiency from your engine. That's the "why" of a cooling-water strainer!

Install a Kraissl Sea-View strainer—the transparent sump allows instant visual check on flow and debris—no tools needed for easy cleaning. Stock sizes, 1/2"-3" intake and discharge; optional direction of flow.

Bulletin A-1735
gives you all details—
write today!

KRAISSL **KRAISSL** CO. Inc.

287 Williams Ave., Hackensack, N. J.

FLYING DUTCHMAN JR.

**FIBERGLASS HULL AND DECK
ALL STAINLESS STEEL FITTINGS
NO MAINTENANCE—EVER**

Non-sinkable modern international one-design planing racer-day sailer. Length 13' 2", beam 5', sail area 100 sq. ft. Light weight for car top or trailer. Fast with outboard motor too. Excellent fleet boat for yacht clubs. \$997 complete with sails. Also—the 19' 10" FLYING DUTCHMAN—prices and specifications on request. Write Dept. B for brochure and special offer.

**VAN BREEMS
INTERNATIONAL CORP.**

STAMFORD, CONN., U.S.A.



TEL.: DAVIS 4-9900

RUGGEDNESS, roominess, and ease of handling are outstanding features of the Topper Hardtop Sportsman, according to the manufacturer, Topper Boat Co., 5816 Ritchie Highway, Baltimore 25, Md. This model is 20 ft 6 in. long, 8 ft beam, and weighs approximately 1175 lbs.

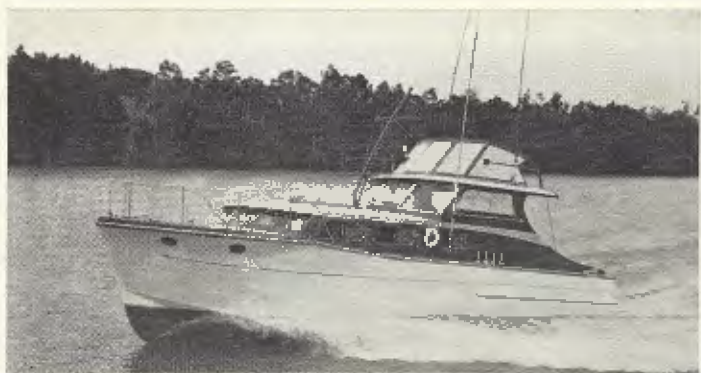
Designed for single or twin outboard engines, and capable of speeds to 30 mph, the hull of the Hardtop Sportsman is made of one-half inch marine plywood over white oak frames. Side decks, cabin sides, and trim are mahogany. The upholstered seats in the cabin convert to make berths for two.

Standard equipment includes Beach mechanical steering, navigation lights, wiring and switches, plus additional mattresses for the berths. It is priced at \$1,775.



The Topper Hardtop Sportsman has a roomy cockpit, convertible berths for two in the cabin, takes single or twin motors.

Safti-Craft Queen Liner



On page 78 of the January issue we printed a description of the new 41 ft 6 in. Queen Liner Express built by E.W. & A.P. Dupont, Inc., of Morgan City, La. In error, the picture used to illustrate that description was of a larger boat, by another builder. The boat shown above is the Safti-Craft Queen Liner Express—which we publish to set the record straight.

To DOUBLE YOUR PLEASURE from OUTBOARD Motoring!

Write for this FREE CATALOG

MORE SPEED . . . BETTER SKIING . . .
BETTER LOAD-CARRYING ABILITY . . .
each is available with a MICHIGAN wheel properly matched to your outfit . . .
thoroughly proved by actual running tests to give far better results than the original propeller. You'll find it in your copy of this catalog, together with 8 means of checking your outfit for best performance . . . and hundreds of bargains in fine boating accessories. Send a card, right NOW!



MICHIGAN WHEEL CO.

GRAND RAPIDS 3,
MICHIGAN





SEARCHLIGHTS

VISIT OUR BOOTH No. 704—CHICAGO SHOW



Cabin Controls
for
medium cruisers



Handy on any Boat



Remote Controls
All Types



For Large
Cruisers



Sirens and
Air Horns



2 in 1 Portable
and deck type

Address Dept. 21 for free catalog

The PORTABLE LIGHT COMPANY, Inc.

216 WILLIAM ST. NEW YORK 38, N.Y.

NEW CHETEK BOATS

Again in '58 . . . Profit Pacers!



- Styling that has "sell".
- Longer lengths, deeper depths, broader beams.
- Wider flared transom to fit bigger '58 motors.
- Customcrafted models at below luxury price.
- A model for every customer requirement.

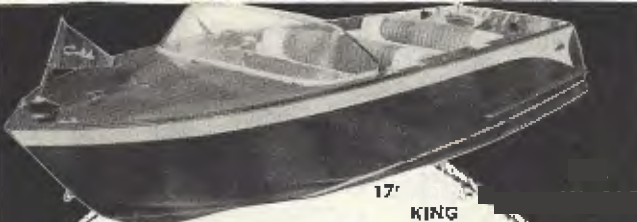
NOW CHETEK LAPSTRAKE BOATS IN 17' AND 18' MODELS

Chetek answers the demand for big lapstrake boats. Now you can deliver Chetek lapstrake boats with new, longer lengths, deeper mid-ship depths and broader seaworthy beams. Chetek boats breeze across the waters with new ease and smoothness, because of precise engineering that develops safe, agile performance. Test after test proves Chetek's rugged durability.

Demonstrate the restless eagerness of a Chetek boat by giving your customers the thrill of piloting any of the new lapstrake models.

CHETEK BOATS

Visit the Chetek display at the Chicago National Boat Show, February 7 to 16, Booths 588, 589, 590. Look into a Chetek franchise. Just write to Chetek Boats, 54 Dove Road, Chetek, Wisconsin.



17' KING

The Royalty Line

by Carlisle

Five magnificent, top-performing inboard and outboard runabouts

17' AQUA-KING • 17' AQUA-QUEEN
17' LORD THUNDERBIRD • 17' NOBLEMAN
17' SQUIRE

Chris-Craft engines, 60-105 H.P.
Top skiing... thrill riding... fishing...
ideal for all the family

Buoyancy, balance, stability, action in every line
Two-tone color styling Years ahead design
All mahogany construction • Luxury appointments
Low maintenance

Ask about Carlisle's newest luxury outboards, the 17' Prince and the 17' Ambassador. See us at the Miami Boat Show.

17' AQUA-QUEEN



Carlisle

Morrisville

MORE THRUST HERE




MORE FUN HERE

COLUMBIAN PROPELLERS

Write for new 1958 Catalog of Propellers and Accessories to



MOLDED PLYWOOD BOAT HULLS



BUILD 'EM BETTER AT HALF THE COST!

Stronger than steel by weight! Multilaminated, seamless hulls. Compound curves molded for life into the balanced molded plywood. Aerodynamically superior! Low cost! Semi-kit parts available. Save 75% on labor! Get factory-built appearance and performance.

... Build CRUISERS, RUNABOUTS, DINGHYS

Write for free Catalog

U.S. MOLDED SHAPES, INC.
641 MARKET ST., S. W., GRAND RAPIDS, MICH.

The Borum 17-ft Voyager

THE LATEST model to be announced by Otis C. Borum Boats, Inc., of Jacksonville 1, Florida, is the 17-ft Voyager, which features a wrap-around panoramic cabin window and bridge deck controls.

The Voyager series has sleeping accommodations for as many as four in separate compartments, ample lockers, and two swivel deck chairs in the cockpit. Standard equipment includes cushions, forward steering, folding top, side and after curtains, screens, and navigation lights. A marine toilet is optional. The builder states that 35 hp will give satisfactory performance for average loads.



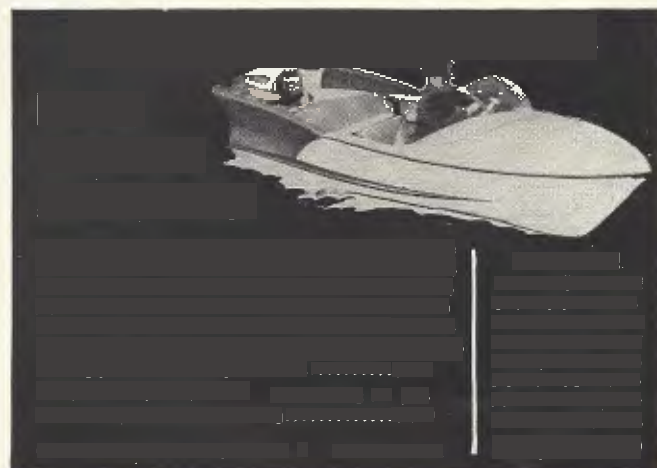
The Borum Voyager has sleeping accommodations for four.

Feather Craft Presents New Models

FEATHER CRAFT, INC., now in its thirteenth year of manufacturing aluminum hulls, predicts that last year's success with color anodized aluminum boats will call attention to rider comfort and more attractive boat interiors. Their deluxe models will have fully upholstered seat back rests, with fabrics and trim accentuating the anodized hull colors.



The Feather Craft Clipper, restyled inside this year, takes the largest outboard motors, makes a good ski tow boat.



bringing out several new models. The 14 foot Hawk handles motors from 5 to 55 hp. The Hawk II is a fast runabout with tail fins, clipper bow, and side decks. Both have a new chine designed for better turning characteristics. Seats are floating, unconnected to the boats' bottoms, to minimize the usual shock of pounding waves at high speeds.

Another 14 footer, the Lark, is a standard utility open top craft with medium range and horsepower qualifications.

A new step into the fiberglass field is taken by the company with its 15 foot Runabout, which has a 32 inch depth amidship and rib-lined foredecks.

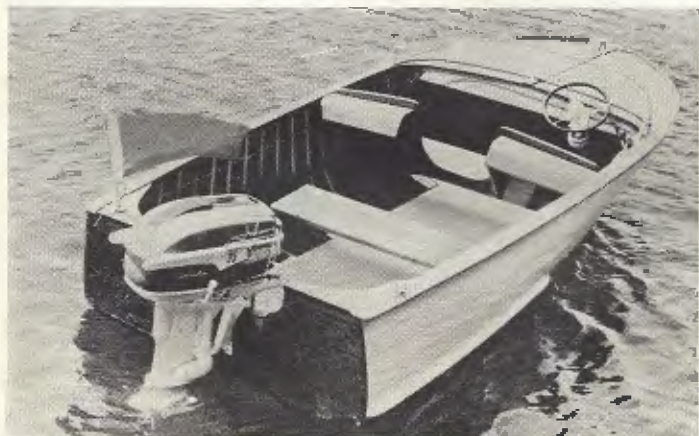
Two other new models, a newly-styled Clipper, and a Super 17 footer, will be offered as day outboard cruisers for single or dual large motor installations. They will both utilize heavier than their usual gage aluminum hull bottoms. The Super features sleeping facilities and optional hardtop.

Feather Craft Inc., 450 Bishop St., N.W., Atlanta, Georgia.

Finlander Announces The Speedster

FINLANDER BOATS, INC., (formerly Finnware Trading Corp.) has added a new 15-footer to its 1958 line, named the Finlander Speedster. Of clinker construction and copper riveted throughout, it has the same structural features as other Finlander Skiffs, with the exception of the type wood used. To make this boat light and fast, and more easily trailered, 5-ply mahogany plywood has been used instead of the traditional solid wood planking of other Finlanders. It comes equipped with a wrap-around or mahogany windshield, or it can be had without a windshield.

A new clinker-built sailboat is offered in limited quantity. This is known as the 25 foot Finlander Folkboat, and is an adaptation of the well known Scandinavian Class Folkboat. It will sleep four and can be equipped with galley, toilet, and small auxiliary engine, or an outboard motor.



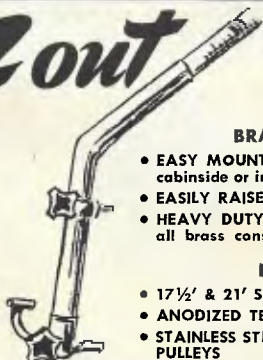
The 15-ft Speedster is the latest addition to the Finlander line. Planking is five-ply mahogany plywood, copper riveted.

E-Z out

**OUTRIGGER
BRACKET
AND
POLE**

Design, quality and
appearance for the
finest boats.

DEALER INQUIRIES
INVITED



BRACKETS

- EASY MOUNTING
cabinside or inside gunnel
- EASILY RAISED AND LOWERED
- HEAVY DUTY CHROME PLATED
all brass construction

POLES

- 17½' & 21' SECTIONAL POLES
- ANODIZED TEMPERED ALUMINUM
- STAINLESS STEEL BOLTS &
PULLEYS

Frank's Boat Service

P.O. Box 389, WEST PALM BEACH, FLORIDA

Join the few who recognize superb design
and master marine construction . . .



• Advance Styling

• Quality Materials

• 8 Smart Runabout Models

• Inboard or outboard powered Sea Skiffs

for further information
write to:



BUILDERS OF A.N.A. BOATS • West Norfolk, Va.

SAFETY AFLOAT—SONAR IN YOUR BOAT

**BRAND
NEW!** Sonar
MARINE RADIO TELEPHONE

MODEL 65, 65 watt marine
6 channel with broadcast band.
Receiver, transmitter and power
supply all self contained. 6
or 12 volts.

only **\$395.00**

MODEL 90, 90 watt, same
as above, with 1 dynamotor
power supply 12 or 32V.
\$495.00

TO COMMERCIAL BOATMAN
- MEETS C.G. REGULATIONS



This little ad
can save you money!

5 NEW CRUISER KITS

Many other mod-
els. Best values in
fiberglass cover-
ing kits, marine
supplies.



SHOW A.L.
\$399

FREE
COLOR
CATALOG

TAFT MARINE WOODCRAFT

Dept. B-258 636 39th Ave. N.E. Minneapolis 21, Minn.

Vanguard

**- The MOST BOAT...
the MOST FUN**



for the **LEAST WORK** and **MONEY**

Six, lightning-fast, all-fiberglass, easily-maintained Vanguard models for '58 — each your best boating buy. Big, rugged 17' Jupiter above... sleek runabouts like 15' Satellite and 14' Missile (which come completely equipped at low, low prices) and roomy utilities and fishing models. Safety... durability... six color choices in every model. See Vanguards now — see why they lead all others!



**Write TODAY FOR
FREE FULL-COLOR FOLDER**

958 W. 20th Street Hialeah, Florida

Walter Clean-Flo Keel Coolers

CLOSED COOLING • CLAMP ON MODEL •
NO CORROSION, RUST, SAND, DIRT.
SIZES FOR ALL ENGINES — BOATS

PROTECT THE LIFE OF
YOUR ENGINES

NEW
STREAMLINED
MODEL

Makers of:
Reduction Gears •
Transfer Drives

ILLUSTRATED LITERATURE ON REQUEST

84-92

FRAME-KITS
PATTERNS AND PLANS
CULVER CRAFT SUPPLIES
RIBS, TRANSOM and
BOWSTEM, — YOU
supply the Plywood



28 MODELS — 10' to 25', Inboards and Outboards. Cruisers, Utilities, Runabouts. All modern designs. We supply Ribs, Transom and Bowstem ready to set on the keel. You supply and cut plywood from our Plans, saving expensive freight costs. FULL SIZE PATTERNS AND PLANS. LARGE ILLUSTRATED CATALOG, 50 cents, or state requirements.

Culver Craft

DOWNEY

P.O. Box 381B

CALIFORNIA

19 foot Family, 21 foot Fisherman, and 24 foot Sportster, remain basically unchanged, with a few exceptions. They will all have mahogany plywood decks and ventilating windshields, and will be made of 1/2 to 3/4 inch Arctic Pine planking, with steam bent oak ribs 8 inches apart. They will be copper riveted and brass fastened throughout.

Finlander Boats, Inc., Route 17, Upper Saddle River, N. J.

Wide Choice of Chris-Craft Kitboats

CHRIS-CRAFT KIT BOATS now enable do-it-yourself fans to produce a professional looking job whose size is limited only by the pocketbook and/or ambition of the back yard craftsman. There is a kit to suit both. The baby of the family is the ever-popular eight foot pram, which can be assembled in a single weekend, and hoisted onto a cartop for immediate transportation to the nearest water.



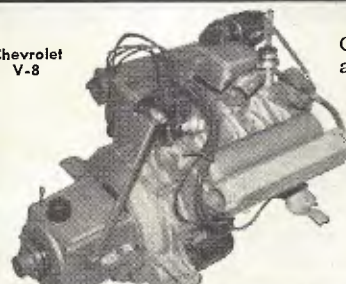
The Chris-Craft 22-ft Express Cruiser is offered as either a prefabricated kit-cruiser or as a factory-finished boat.



Among the smaller kitboats offered by Chris-Craft Corp. is the new 12-ft Meteor, a double cockpit outboard runabout.

The largest is a four-sleeper, 22 foot cruiser, the Express. Dining table and toilet can be installed in the roomy cabin, and single or twin outboards or inboards provide speeds up to 27 mph. This is definitely not a one-weekend undertaking, but

Chevrolet
V-8



World's Most Complete Line
Compare the world's finest automotive engines, PLUS a Barr Conversion Kit with any other power plant afloat. It is powerful, compact — economical to operate — low initial cost — nationwide parts & service available.

Write for FREE Catalogue
and Conversion Hints

B H



16' MERCURY SABRE • SAVE UP TO \$339.50



18' MERCURY MUSTANG • SAVE UP TO \$436.00

contact your local Mercury dealer — or write

MERCURY BOAT CO.
Burbank, California

MERCURY • MERCURY • MERCURY • MERCURY • MERCURY • MERCURY • MERCURY • MERCURY • MERCURY

the result looks like a factory-finished boat. Between these two, there are available two 12 footers, the Vagabond and Meteor; four 14 footers, the Caribbean, the Comet, the Grayling and the new Barracuda; the 15 foot Tarpon; and, in the 16 foot group, a Custom Runabout, a Sports Utility, and a Sports Cruiser.

Moving into the larger class, there are three 19 footers, a Sports Runabout, a Sports Convertible, and a Sports Express. These are the swanky members of the Kit family, with swept-back fins and rakish, wrap-around windshields. The Convertible has a four-way folding top. All, it is reported, can attain speeds up to 37 mph.

Chris-Craft Corp., Pompano Beach, Florida

George W. Sutton, Jr.

GEORGE W. SUTTON, JR., of New York and Darien, Conn., public relations counsellor and president of Sutton News Service, Inc. of New York, widely-known authority on motor boat racing and writer for newspapers, magazines, radio and the screen, died January 1st at Medical Arts Center Hospital in New York. His age was 70.

Mr. Sutton was an Honorary Life Commodore of the American Power Boat Association, having served three times as its president. For more than two decades, and at the time of his death, he had been chairman of its International Affairs Committee. He was vice-president of the international ruling body in motor boat racing, the Union of International Motorboating (representing 31 countries) at Ghent, Belgium, and was honorary life president of the Marine Trades Association, having resigned as president after serving for seventeen terms. He was also a vice-commodore of the Motor Yacht Club de la Cote d'Azur, Cannes, France.

NOW! Safe Boating

with this unlimited-range

PORTABLE MONITOR

for outboard or cruiser use!

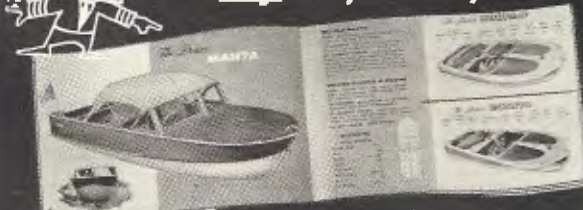
- Tune in on Coast Guard! Weather! Ship-to-ship! Ship-to-shore!
- Tunes from 2000-3000KC marine band!
- Unlimited range marine reception!
- Uses standard portable batteries!
- Batteries last approx. 200 hours!

for only
\$29⁹⁵
less batteries



Sold only through marine dealers. Write to:

LOOK AT THIS CATALOG *before you buy a boat*



Dunphy
MAHOGANY

DUNPHY BOAT CORP.

544 Broad St., Oshkosh, Wisconsin

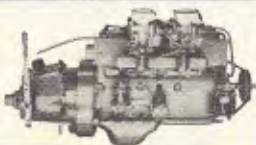
STOKES

BRAND NEW INBOARD

AT SENSATIONAL
LOW, LOW PRICES

HUDSON WASP 6

126 HP — First marine conversion ever offered of this proven engine. Brand new block fully converted with all new salt water resisting marine parts, including reverse gear. Ready to install — price only: **\$495.00**



HUDSON HORNET 6

Another proven American Motors engine, completely marine converted by Stokes. New block and all quality new marine parts. For salt or fresh water use. Reverse gear included — an exceptional 170 HP marine engine — only: **\$595.00**



Stokes offers money saving Conversion Kits and Reverse Gears for many popular engines. Also big selection of used and rebuilt motors, hardware, paints, supplies. Send for Free Catalog today!

STOKES Marine Supply Co.

DEPT. L
COLDWATER, MICH.

AMERICAN YACHTSMEN'S ASSOCIATION

A non-profit corporation organized
for boatmen by boatmen



SEE WHAT YOUR \$10 MEMBERSHIP BRINGS YOU!

1. Lower Marine Insurance Rates
2. Savings on Merchandise
3. Charts mailed to any location
4. Monthly newsletter
5. AMYA burgee and pin
6. Yard and work tips
7. Legislative representation
8. Safety development information
9. Swap service
10. Individual questions answered

AMERICAN YACHTSMEN'S ASSOCIATION

Box 588, Annapolis, Maryland

Please send, without obligation, descriptive brochure of benefits through AMYA membership.

Name.....City.....

Address.....State.....

ALAN-CLARKE CO.
Sailmakers-Boat Supplies
 BE • 3-5098 75 CHAMBERS ST., N.Y.C.

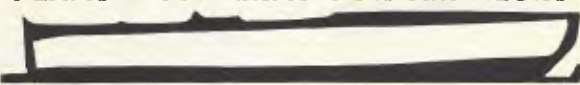
YACHT SAILS
 FOR QUALITY-WISE SKIPPERS

WINTER BOAT COVERS
 COCKPIT COVERS — BOAT CURTAINS — CANOPIES.

CUSTOM MADE CANVAS
 For Yawls, Schooners, Specializing in RACING SAILS and Hardware for "Stars, Snipes, Comets, Lightnings, Penguins," etc.
 Sail Boat and Motor Boat Hardware and Marine Paints • Send for Catalog BW

JOHN B. CLARK
Yacht Designer
 Modern Practical Designs for Professional and Amateur Builders — Inboard and Outboard Runabouts — Power Cruisers — Auxiliaries
 WOOD, PLYWOOD, AND WELDED STEEL CONSTRUCTION
Your Inquiries Invited
 29075 Osborn Rd., (P. O. Box 66) Bay Village, Ohio

PLANS • PATTERNS FOR AMATEURS



E. G. McCREA & CO. NORTH HATLEY, QUE., CANADA • Dept. B
 Naval Architects
 Send 25c coin for Booklet and Information

JOHN L. HACKER
 PRACTICAL MARINE ARCHITECT and ENGINEER
 Almost 50 years designing and building experience of successful craft of all types, round and V bottom.
 Speed, Express, Cruising and Commercial up to 100 foot.
 Many Attractive Stock Plans up to 65 foot.
BROKERAGE—INSURANCE
 604 Kerr Building Detroit 26, Mich.

A. V. MENSCHIK
Naval Architect
 9 Barnes Road Hingham, Mass.

BOAT PLANS New series of easy to build small boat designs utilizing longitudinal method of framing.
HARVEY R. BELLIS
 3421 Dupont Avenue South Minneapolis, Minn.
 Send 25 cents for descriptive literature



PHILIP C. BOLGER, BOAT DESIGNER
 250 WASHINGTON STREET TEL. 419
 GLOUCESTER • MASSACHUSETTS

A. M. DEERING AND SON
Naval Architects
 Stock and Custom Designs for boats of all types and sizes for professional and amateur builders. Wood and steel.
 228 N. LA SALLE STREET, CHICAGO 1, ILLINOIS
 Marine Insurance • Boat Broker State 2-8932

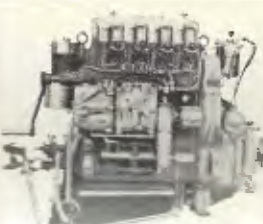
Best Buy — SEE
Chatfield's
 SALES MARINE SERVICE
 FT. OF GORDON PL. FREEPORT, L.I.

CONSULTANTS — DESIGNERS
Stock — DESIGNS — Custom
 Expert Solution of All Boating Problems Since 1905
 Member: SSCD, SNAME
WESTLAWN ASSOCIATES • MONTVILLE 3, N. J.

Boat Plans, Patterns, Etc.
 6½ TO 34 FEET — OVER 200
 LARGE POWERBOAT CATALOG.....50c
 YACHT AND SAILBOAT CATALOG....25c
MARINECRAFT BOX 161-B, BRIGHTON, MASS.



BOAT LUMBER Cedar • Mahogany • Silka Spruce
 Teak • Oak • Cypress • Redwood
 Waterproof Exterior Plywood 3/32" to 1" — 8' to 16' long
MAURICE L. CONDON CO. INC.
 270 FERRIS AVENUE Dept. C-7 WHITE PLAINS, N. Y.
 Telephone: WH 6-4111 • Open Saturdays



Used ex-British Admiralty release
 Ultra modern 2-cycle marine diesels, Coventry KF4. 50 BHP lightweight units. Oil operated reverse gears.
 Send for details now to:
Diesel Engine Exports, Ltd.
 Rothwell Haigh, Leeds, England

FOR CHARTER: Cruise the Bahamas in deluxe private stateroom with private toilet for party of two aboard the two year old 32' Ketch "Aloha". Foam mattresses, refrigeration, two way radio, powered tender. YACHT "ALOHA", 1918 Pine Tree Lane, Largo, Florida.

EXCLUSIVE COOPERATIVE yacht club being formed on a secluded island in the Florida Keys, Docks, marina, and shore facilities provided. Restricted to yachtman members only. VALHALLA CLUB, Box 192, Marathon, Florida.

YACHTSMAN'S DREAM
 Chris-Craft 33' Twin-Screw Capitan and custom-built, all steel boathouse and electric-boat hoist for winter storage. Attached living quarters sleep 6-8 with large screened and glassed porch; white wrought iron furniture, twin beds. 180' river frontage x 200' deep. Located West Huron River — one mile up-stream from Lake Erie. Everything in A-1 condition. Ill health forces sale. Will sacrifice with or without boat.
 A. M. DONZE
 Timken Roller Bearing Co., Canton, Ohio

ENGINE BARGAINS. We have just issued a new list of used and factory rebuilt marine engines. List includes many unusual bargains and covers wide range of sizes. Write today, ask for mid-winter bargain list, **UNIVERSAL MOTOR COMPANY**, 25A Universal Drive, Oshkosh, Wisconsin.

FOR SALE: 33 Ft. Chris-Craft Capitan — 1954 — Twin Chris-Craft 145 — Dual controls — Complete — Like new — \$12,500.00 — M. A. BAUMANN — 140 West 4th Street, Erie, Pa.

FOR SALE: (2) Hallicrafters HT-20 100 Watt Transmitters, commercial frequencies, suitable for yachts, etc. New condition, crated, one owner. Special for 2 \$550.00. **EMIL GRIECO**, 54 Andrew St., Meriden, Connecticut.

FOR SALE: 40 Ft. Matthews Sedan — 1948 — Plan A — Twin Packard 8's — One owner — Used only on fresh water — Dinghy — Hot water — Telephone — \$16,500.00 — M. A. BAUMANN — 140 West 4th Street — Erie, Pa.

FOR SALE: Bartold's 21' 6" Demonstrator. All Steel 215 h.p. overnighter. Price \$3,000. **NEW YORK WELDING WORKS**, Boat Division, 150 Westcott Street, Rochester, N. Y.

FOR SALE: Used and Rebuilt marine motors and converted engines. All makes and models from 2 to 550 hp. Send for big FREE bargain list of engines, reverse gears, surplus marine hardware items and other supplies. **STOKES MARINE SUPPLY COMPANY**, Dept. 15, Coldwater, Michigan.

FOR SALE: Cabin Cruiser, 21' x 8': Complete with Trailer and Fully Equipped. Stove, Sink, Water, Ice Box, Sleeps Two. Pair of 30 H.P. Lark Elec. Starting, Remote Controls, Evinrudes. Everything new in Aug. '56 at Annapolis. 27 M.P.H. Towed to Fla. last year by owner. Asking \$3,500. Used less than 50 hrs. **J. H. WELLS**, P.O. Box 670, Hollywood, Fla.

FOR SALE: 67 ft. aux. Marconi ketch. Copper fastened and sheathed, teak hull, 12 ton lead keel, 65 HP. 1953 diesel, sail, two dinghys as new, outboard, laying England, \$10,000. **EDWARD BUFF** (Leader) Poltbat, 19 Rector St., New York City.

OWENS CRUISER SALE & SERVICE

1958 MODELS ON DISPLAY

16—19—22—27—31—35—New Models in Stock

21' Owens, 54 Model, 1st class condition, lots extras...	\$ 1,600
22' Owens Express, 100 motor, lots extras. 1957 model, 1st class condition.....	3,000
22' Owens Express, 100 motor, lots extras, 1956 model. New condition.....	2,900
26' Auxiliary Sloop, Like new.....	5,400
26' Sea Bird Auxiliary Yawl.....	3,750
35' Owens, new condition.....	13,500

FAIR HAVEN YACHT WORKS

FAIR HAVEN, NEW JERSEY

Phone Shadyside 7-3010

USED BOATS

Listed below are a few of the many excellent used boats we now have available.

42' 1951 Chris-Craft Commander, repowered 1956 twin 200 h.p. Chrysler V8s, sleeps 6, RCA S-S, Coz, bottled gas, elec. toilet, monel shafts, aux. generator and other worthwhile equipment. Excellent condition. \$18,700.00
 24' 1957 Bristol Barracuda, 135 h.p. Gray, top and side curtains. Display model never in the water. List — \$5,963.00. Reduced. \$4,350.00
 21' 1957 Chris-Craft Capri, 175 h.p., cover. Display model never in the water. List — \$6,649.00. Reduced. \$4,650.00
 18' 1956 Shepard Runabout, 135 h.p. Gray, sport top, in new boat condition, used 25 hrs. \$3,650.00
 SEND NAME and address for complete list of over 100 inboard and outboard used boats, with prices and brief descriptions. Please state type of boat in which you are interested. Over sixty used outboard motors from \$45 on money-back guarantee.

DALE *Yacht Basin,*

BAY HEAD, N.J.

ONE OF AMERICA'S FOREMOST BOAT DEALERS

32nd year on the same site under the original owner-management. A friendly, reliable place to buy your boat, new or used.

CHARLES W.

LN & INC.

FLORIDA OFFICE: 900 S.E. 17th STREET (near Bahia Mar), FT. LAUDERDALE

JAMES DANEHY, Manager

P. O. Box 3032

Phone: Jackson 4-3414

USED BOATS from 10' to 46'.

Write today for our complete listing.

BROWN'S MARINA, Lakeside, Ohio

REBUILT ENGINES. 90 hp, fully rebuilt and guaranteed marine engines at \$495.00. Send for bargain list. **OSCO MOTORS CORPORATION**, Philadelphia 40B, Pa.

GOVERNMENT SELLS: Surplus Boats; LST's, LCVP's, Aircrafts; Helicopters; Jeeps; Trucks; Tractors; Radiotelephones; Misc. Buy direct now from U.S. Government. Depot List and Procedure, \$1.00. **BRODY**, Box 8-MA, Sunnyside 4, New York.

NOTICE: Propeller Reconditioning. All makes. All Types. Our new 1000-lb. 75-ton hydraulic propeller fixture holds propellers to straighten for perfect synchronization, precision instrument reading and correct propeller pitch. **NEW YORK WELDING WORKS**, 150 Westcott St., Rochester 5, N. Y.

FOR SALE: 39 Ft. Richardson Sedan — 1957 — Twin Chrysler V-8's — Teak decks — Complete — \$22,500.00 — **M. A. BAUMANN** — 140 West 4th Street — Erie, Pa.

FLORIDA CHARTERS: 26' sloops for cruising four on Biscayne Bay and Florida Keys. Atalanta and Quadrant classes. **LAURENCE HARTGE**, Galesville, Maryland, University 7-2018.

AIR — SEA RESCUE 63'. Built by Miami Ship, latest model. Radar equipment, spare engines, spare propellers, bridge hydraulic controls for gear shifting and throttles. 36 knot speed, 1000 mile range. Complete \$12,500.00 **CONSOLIDATED INDUSTRIES**, Dover, Delaware, Phone 5956.

FOR SALE: 1947 Atkins Ketch 37 x 11 x 3.5 Seaworthy-family cruising auxiliary Kermath Seaprince. Sleeps 6 two cabins. Enclosed head, hanging locker, 6' headroom. Simple rig. Self-bailing cockpit. Asking \$11M but will make engine and sail allowances. **JOHN MEISSNER**, Wellesley Farms 82, Mass.

WATER-BIKES SLIGHTLY USED. Fine opportunity for individual owners, resort, rental concession, to acquire world-famous modern foot-pedal craft. **SELLECK WATERCYCLES**, Boca Raton, Dept. 279, Florida.

FOR SALE: Beautiful 1934 28-foot GARWOOD RUNABOUT

225 h.p. Scripps 202 engine. Boat and engine in perfect condition and invite most careful scrutiny. Boat completely wooded and five-coat varnish job and Mercop bottom in Feb. '57. Speeds: 35-40 m.p.h.

Equipment includes: convertible top for front two cockpits; individual canvas cockpit covers; two overall canvas boat covers; transom cover; etc., built-in battery charger for dock line with polarity reversal indicator. Pistol-grip spotlight. CO2 and pyrene fire extinguisher. Extra prop, anchor, paddles, boat hook, etc.

PRICE: \$4,750.00, f.o.b. Sarasota, Fla.

CONTACT:

DR. T. G. DICKINSON

1880 ARLINGTON STREET

Sarasota, Fla.

Tel. RI 7-9181



FOR SALE: 27 Ft. Richardson Utility with galley & berth arrangement — 1957 — Twin Gray 100's — Fully equipped — \$7,000.00 — **M. A. BAUMANN** — 140 West 4th Street — Erie, Pa.

BUILD YOUR OWN BOAT PLANS

by **Claude W. Horst**, Naval Architect • 6515 Earl Ave. N.W., Seattle 7, Wash.



Outboard and inboard runabouts, utilities and cruisers, 18' 6" to 30' 0". Easy to follow plans especially developed for the build-it-yourself yachtsman. Structural sections are shown in full size detail. Prices run from \$25.00 to \$50.00. Send for detailed information.

FOR SALE

40' Custom Cruiser, welded steel, fully equipped for living, cruising and entertaining at \$12,500 — only 25% of replacement cost. For complete information, write: **Rane, P. O. Box 8486, Jacksonville 11, Florida.**



Build a Boat at 1/3 the Cost



17 FT. 9 1/2 IN. VEE-DRIVE RUNABOUT



22-FOOT OUTBOARD CRUISER

with Cleveland's full size, cut-to-shape boat patterns, detailed blueprints, and specifications. Choose from a huge selection of modern Naval architect-designed cruisers, runabouts, outboards, racers, houseboats, sailing craft, etc. in lengths 7 1/2 to 38 feet. Send 50 cents (coin) for new 85 page catalogue. "How to Build a Boat" booklet \$2.50. Write to-day!



16-FOOT INBOARD RUNABOUT

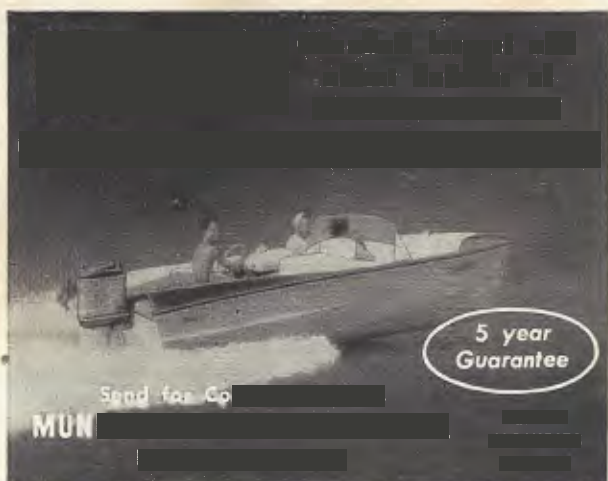
30-FOOT CABIN CRUISER

Cleveland Boat Blue Print Co., Inc.

Dept. A-5

P. O. Box 1651

Cleveland 4, Ohio



BOATS SELL FOR SAME PRICES IN U. S. AS IN CANADA

USE THESE OUTSTANDING PRODUCTS



Get these and other Stay-Tite Waterproof Products from your Marine Supply dealer—and you get the best!

STAY-TITE PRODUCTS CO.
CLEVELAND 4, OHIO

INLAND-WATERWAY-GUIDE



EVERYTHING YOU'LL WANT TO KNOW about the inland and protected waterways! Illustrated! Features! Cruising Tips! Where to stop... Where to shop... Where to fuel... Where to get repairs... What to see and do... Always up-to-date. Completely revised each edition. Each edition includes a list of in-and-out facilities for outboarders.

INLAND WATERWAY GUIDE
25C W. Broward, Boulevard
Fort Lauderdale, Florida
Northern and Southern editions
bound together in Leatherette \$5
Your name or name of boat in gold \$1

\$1.50 per edition. On sale at marine dealers, marinas, bookstores. Or postpaid from the publishers.

1958

SOUTHERN EDITION

Complete yachting facilities from Norfolk via the Intracoastal through Florida to New Orleans.

1958

NORTHERN EDITION

Complete information on protected waterway cruising from Boothbay Harbor, Me. to Hampton and Richmond, Va.

NOW OUT! 1958

GREAT LAKES EDITION

Covers yachting facilities from New York via Hudson and connecting waterways to Montreal and Port Huron, including south shore Lakes Erie and Ontario.

INDEX TO ADVERTISERS

A		J	
Alan Clarke Co.	78	Jackson's Sons, Inc., Samuel	62
Alcort, Inc.	60	Johnson Motors .Second Cover	
Aluma Craft Boat Co.	67	K	
Aluminum Marine Hardware Co., Inc.	52	Kainer & Co.	70
American Yachtsmen's Association	77	Kraissl Co., Inc.	72
Apelco Marine Telephones	44	Kuhls, H. B. Fred	64
Applied Electronics Co., Inc.	44	L	
Aristo Craft	1	Lehman Mfg. Co.	66
Arkansas Traveler Boats	65	Lyman Boat Works	47
Associated Naval Architects	75	M	
Atlanta Boat Works	1	Marblehead Boat Yard Co.	70
Atlantic Pacific Mfg. Corp.	57	Marinecraft	78
Attwood Brass Works, Inc.	9	Mastercraft Trailers, Inc.	46
B		Matthews Co., Inc.	41
Baltimore Copper Paint Company	68	McCrea, E. G.	78
Barbour Boats, Inc.	71	Menschik, A. V.	78
Barr Marine Products Co.	76	Mercury Boat Co.	77
Bay City Boats, Inc.	66	Michigan Wheel Co.	73
Bellis, Harvey R.	78	Molded Fiber Glass Boat Co.	61
Bliven & Co., Charles W.	79	Mount Desert Yacht Yard, Inc.	69
BoatLIFE	62	Munro Boats-Motors, Ltd.	80
Bolger, Phillip	78	O	
Borum Boats, Inc., Otis C.	59	Orlando Boat Co.	66
C		Out O' Gloucester Enterprises, Inc.	45
Carlisle Marine Mfg. Co.	74	Owens Yacht Company, Inc.	11
Central Electronics Corp.	77	P	
Chatfield's	78	Palmer Engine Company, The	54
Chetek Boats	73	Peninsular Fiberglass Products	76
Chris Craft Corp. .Back Cover		Peterson Bros., Inc.	71
Cleveland Boat Blueprint Co.	79	Peters & Russell, Inc.	69
Columbian Bronze Corp.	74	Petti Paint Co., Inc.	15
Condon Co., Inc., Maurice L.	62 & 68	Portable Light Co., Inc., The	73
Cruis-Along Boats, Inc.	48 & 49	R	
Culver Craft	76	Roamer Steel Boats	43
Custom Craft Industries	74	S	
D		Sea Sled Industries	56
Dahmer, Inc., Henry	65	Sonar Radio Corp.	75
Dale Yacht Basin	79	Speed Ships	11
Danforth Anchors	50	Stamas Boats, Inc.	63
Danielson Mfg. Co., The	67	Standard Glass Products, Inc.	55
Deering & Son, A. M.	78	Stay Tite Products	80
Dolphin Paint & Varnish Co.	58	Stokes Marine Supply Co.	77
Douglas Fir Plywood Association	4 & 5	T	
Dunphy Boat Corp.	77	Taft Marine Woodcraft .	75
DuPont deNemours & Co. (Inc.), E. I.	42	U	
E		U-Mak-It Products	72
Evinrude Motors .Third Cover		Universal Motors	16
F		U. S. Molded Shapes, Inc.	74
Fair Haven Yacht Works	79	V	
Frank's Boat Service	75	Van Breems International Corp.	72
G		Vocaline Company of America, Inc.	51
Garrett Corp., The	60	W	
Gator Trailers	71	Wagemaker Co.	39
General Marine Co.	53	Walter Machine Co., Inc., The	76
Glastron Boat Division ..	55	Westlawn Associates	78
Glen L. Marine	70	Wilcox Crittenden	58
Grafton Boat Works	65	Winner Mfg. Co.	69
Gray Marine Motor Co.	7	Woolsey Paint & Color Co., Inc., C. A.	13
Griffin Anchor Division ..	62	H	
Gruman Boats, Inc.	64	Hacker, John L.	78
Gulf Oil Corp.	2	Horst, Claude W.	78
H		I	
Hacker, John L.	78	Inland Seas Boat Co. ...	68
Horst, Claude W.	78	Inland Waterway Guide ..	80
I		International Yacht Sales	64



one ride and you'll know the meaning of...
"HAPPY AS A LARK OWNER!"

Wouldn't you love to be there . . . winging through spray and sun . . . in a gay Lark-powered runabout? Fact is, it's the *only* way you'll ever know how much the Lark can add to your boating pleasure!

The lilt of its name suggests the Lark's unfettered spirit . . . its crisp response and dazzling power. Its jet-styled beauty conceals the inner miracle of Starflite quiet and smoothness. Its engine floats on rubber mounts in a sound-tight nacelle. Result is a luxurious *new kind* of power . . . ultra quiet, flawlessly smooth! 35 spirited horsepower that'll handle a husky runabout with breath-taking ease! Compare every phase of

Lark performance and you'll know there's nothing to touch it in its price class!

See the Lark and 10 other sparkling new Evinrudes, including the revolutionary 50 hp Starflite V-4! And, if you really want to know the meaning of "happy as a *Lark* owner," ask your Evinrude dealer for a *free* "Revelation Ride." Look for his name under "Outboard Motors" in your phone book. Ask your dealer for free catalog—or write Evinrude Motors, 4248 N. 27th Street, Milwaukee 16, Wisconsin.

A Division of Outboard Marine Corporation
 In Canada: Mfd. by Evinrude Motors, Peterborough

EVINRUDE
quiet outboard motors





All-new 21-ft. Continental Landau gives you beauty, power, performance *plus!* Engines to 300 hp, speeds to 43 mph. Seats 8. Sliding aircraft-type canopy on landau hardtop. Other utilities and runabouts from 17 thru 26 ft.



Family-cruiser buy! New 25-ft. Cadet sleeps 4 in roomy, full-headroom cabin. Enclosed toilet. Ship's galley. Flush aft deck. One-piece fiber-glass cabin top. Engines to 210 hp, speeds to 33 mph. Also 26-ft. model. Outstanding value!



New 38-ft. Constellation (top) sleeps 4 or 6. Modern galley, dinette, salon; flush aft deck. Engines to 550 hp, speeds to 29 mph. Also 28-, 31-, 35-, 42-, 48-, 55-, 65-ft. models. 21-ft. Capri (bottom); engines to 300 hp, speeds to 43 mph.



Luxurious 48-ft. Constellation (top) sleeps 10; boasts salon deckhouse nearly 18 ft. long. Engines to 550 hp, speeds to 28 mph. Low-cost 17-ft Sportsman (bottom), with large open cockpit; engines to 131 hp, and speeds up to 36 mph.



New Chris-Craft for 1958

BEST BOAT BUYS EVER

New Cavalier Boats



Stretch your boating dollar with this 19-ft. Semi-Enclosed Sports Cruiser 2-sleeper. Outboard or inboard. A great buy for a family on a budget. Other models: 16, 19, and 22 ft.



Brilliant new designs . . . exciting new styling . . . a great new line-up of power options . . . plus famous Chris-Craft performance and handling ease. It is the most spectacular new fleet in boating! There are magnificent new Chris-Craft sports boats, cruisers, motor yachts. Round-bilge, lapstrake Sea Skiffs.® Value-packed Cavalier Boats® — runabouts, cruisers, outboard or inboard. Also a complete line of Boat Kits from 8-ft. Prams through 22-ft. Express Cruisers for outboard or inboard power—and a complete line of Marine Engines, 60 through 200 hp. See your Chris-Craft or Cavalier dealer NOW!

New Sea Skiffs



Round-bilge lapstrake design. Double strength where counts. 30-ft. Sea Skiff Cruiser sleeps 4. Engines to 430 hp, speeds to 36 mph. Also 26-, 30-, 35-, 40-ft. cruiser models.



Fast, dry, seaworthy! 22-ft. Open Sea Skiff offers boating its smooth-riding, easy-handling best. Engines to 130 hp, speeds to 31 mph. Other open models: 18, 22, 26, and 30 ft.

Buy your *Chris-Craft* today